# CONSTRUCTION NEWS

PERSONALS, ENGINEERING SOCIETIES, ENGINEERING SCHOOLS, READERS' WANTS, INDUSTRIAL NOTES, PUBLICATIONS.
Supplement to ENGINEERING NEWS. New York, September 22, 1904.

## CONTENTS.

PERSONAL ... 139
  Obituary ... 139
ENGINEERING SOCIETIES ... 139
  Coming Meetings ... 139
CONSTRUCTION NEWS:
  Plans and Specifications on File ... 140
  List of Contracts Pending ... 140
  Railways ... 141
  Street and Electric Railways ... 141
  Light, Heat and Power Plants ... 141
  Bridges ... 142
  Buildings ... 142
  Water Supply and Irrigation ... 144
  Sewerage ... 144
  Streets and Roads ... 145
  Manufacturing Plants ... 146
  Miscellaneous Contracts ... 146
  U. S. Possessions and Cuba ... 147
  Mexico ... 147
  Foreign Contracts and Export News ... 148
  Contract Prices ... 148-149
READERS' WANTS ... 148
INDUSTRIAL NOTES ... 149
PROPOSALS ... 150

## PERSONAL.

Mr. George Ames has been appointed Superintendent of Streets of Manchester, N. H.

Mr. Fred. W. Turner, of Los Angeles, Cal., has been appointed City Engineer of Whittier, Cal.

Mr. R. Henry Jones has been elected Superintendent of the Water-Works of Norfolk, Va., to succeed Mr. H. L. Smith.

Mr. Rollin H. Wilbur has resigned as General Manager of the Lehigh Valley R. R. Co., and the office will be abolished.

Mr. J. H. Jackson, City Engineer of Niagara Falls, Ont., and Miss Wear, of Windsor, Ont., were married at the latter place Aug. 31.

Mr. George D. Blood has been appointed Chief Engineer of the United States & Nicaragua Co., with headquarters at Yauli, Segovia, Nicaragua.

Mr. E. H. Livering has been appointed Resident Consulting Engineer of the Associated mines, located at Kalgoorlie, Western Australia.

Mr. S. S. Neff, formerly of the Boston and Chicago elevated lines, has been appointed General Superintendent of the Mexico City electric traction system.

Mr. Walter H. Bunce has been appointed Chief Engineer of the American Mining Co. His headquarters will be at Port Deitrick, Cape Gracias, Nicaragua.

Mr. W. E. McKinnon, Superintendent of the electric light plant and water-works of Halletsville, Tex., has resigned to accept a similar position at Coleman, Tex.

Mr. F. E. Myers, of Canton, O., has been reappointed City Engineer of that city. A large amount of public work is now being done under Mr. Myers' supervision.

Mr. G. H. Kimball, formerly Chief Engineer of the Pere Marquette, has been appointed Chief Engineer of the Chicago & Alton, with headquarters at Chicago, to succeed Mr. H. F. Baldwin, who resigned last January.

Mr. G. G. Schroeder, Consulting Mechanician, has removed his office from 1344 G St. and 717 14th St., N. W., to office of Industrial Transportation Co., of which he is Mechanical Engineer, at 1310 G St., N. W., Washington, D. C.

Mr. Henry A. Van Alstyne, State Engineer and Surveyor, received a renomination for the above offices at the recent Republican State Convention. It is probable that his opponent on the Democratic ticket will be Richard W. Sherman, of Utica, N. Y.

Mr. George Simpson, Assoc. M. Am. Soc. C. E., has been appointed Chief Engineer of the Thompson-Starrett Co., building contractors, of 49 Wall St., New York City. Mr. Simpson has for some years past held the position of Assistant Chief Engineer of the same company, under Mr. S. C. Weiskopf.

Mr. Claude S. Crocker, for some time Electrical Engineer for the Utah Light & Power Co.'s plant at Ogden, Utah, and later Superintendent of an electric plant at Kalgorilie, Australia, was married to Miss Margaret Marmion, of Freemantle, Australia, the ceremony occurring at the latter place July 7.

Mr. Lindsay Duncan has resigned as Professor of Civil Engineering in the University of Colorado, and has opened an office in the Ernest & Cramer Building, Denver, Colo. Previous to his connection with the University of Colorado, Mr. Duncan held a position in the Cornell University College of Civil Engineering.

Mr. Lewis G. Varney, Civil and Constructing Engineer, who was Engineer for the York Haven Water & Power Co., in the construction of its $3,000,000 plant on the Susquehanna River at York Haven, Pa., has become connected with the York Engineering Co., Inc., of York, Pa. Mr. Varney will continue his residence at York Haven, Pa.

Mr. S. C. Weiskopf, M. Am. Soc. C. E., has severed his connection with the Thompson-Starrett Co., of 49 Wall St., New York City, for which company he has been Chief Engineer. Mr. Weiskopf will continue his extended practice as Consulting Engineer in steel work and foundations of bridges and buildings. His office will be at 68 William St., New York City.

Mr. Charles W. Sherman, M. Am. Soc. C. E., of Boston, has resigned his position as Division Engineer of the Metropolitan Water and Sewerage Board, and on Oct. 1 will become Principal Assistant to Mr. Leonard Metcalf, M. Am. Soc. C. E., Consulting Engineer, 14 Beacon St., Boston, Mass. Mr. Sherman has been connected with the Metropolitan Water Department for a number of years past, serving under Mr. Desmond Fitz Gerald, Past-Pres. Am. Soc. C. E., until the resignation of the latter a year or so ago.

### OBITUARY.

D. L. Van Vlack, President of the Dominion Paving & Contracting Co., died recently at Toronto, Ont., aged 54 years.

Hunter Stewart, formerly Assistant City Engineer of New Orleans, La., died in that city Sept. 7, aged 49 years. Mr. Stewart was connected with Mississippi River Commission as Assistant Engineer for five years, and was also engaged on Government and State levee work in Caddo and Bossier Parishes for the same length of time. He was a graduate of the School of Mines of Columbia, in the class of 1876.

Col. Alexander M. Miller, Corps of Engineers, United States Army, died suddenly of heart failure Sept. 14. Col. Miller was graduated from West Point in 1865 and was assigned to a position as first lieutenant in the engineer corps. Previous to going to Washington, six years ago, he was engaged on various harbor improvements, mostly in the vicinity of New York. For several years he had been in charge of the Washington Aqueduct, the increasing of the water supply of the city of Washington and the installation of the Washington filtration plant. Last January he was given charge of the Potomac River improvements in addition to the aqueduct and other projects. He was 61 years old.

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## ENGINEERING SOCIETIES.

### COMING MEETINGS.

INTERNATIONAL ENGINEERING CONGRESS.
Oct. 3 to 8, 1904. Held at St. Louis, Mo., under the auspices of the American Society of Civil Engineers. Secy., Chas. Warren Hunt, 220 W. 57th St., New York.
AMERICAN BOILER MANUFACTURERS' ASSOCIATION.
Oct. 4, 5, 6, 1904. Annual convention at St. Louis, Mo., Secy., J. D. Farasey, Forest St. and Erie Ry., Cleveland, O.
AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS.
Oct. 4, 5, 6, 1904. Annual meeting at St. Louis, Mo. Secy., G. W. Tillson, Municipal Building, Brooklyn, N. Y.
AMERICAN STREET RAILWAY ASSOCIATION.
AMERICAN RAILWAY MECHANICAL AND ELECTRICAL ASSOCIATION.
STREET RAILWAY ACCOUNTANTS' ASSOCIATION.
Oct. 10 to 15, 1904. Annual meetings at St. Louis, Mo.
RAILWAY SIGNAL ASSOCIATION.
Oct. 11, St. Louis, Mo. Secy., B. B. Adams, 83 Fulton St., New York.
ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 18, 19, 20. Annual meeting at Chicago. Secy., S. F. Patterson, Concord, N. H.
AMERICAN GAS LIGHT ASSOCIATION.
Oct. 19, 20, 21, 1904. Annual meeting at Washington, D. C. Secy., A. E. Forstall, 58 William St., New York, N. Y.
IRON AND STEEL INSTITUTE (Great Britain).
Oct. 24 to 26, 1904. Annual meeting at New York City. Secy., B. H. Brough, 28 Victoria St., London, S. W.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Dec. 6, 1904. Annual meeting at New York City. Secy., F. R. Hutton, 12 West 31st St., New York.
AMERICAN INSTITUTE OF ARCHITECTS.
Dec. 15 to 17, 1904. Annual meeting at Washington, D. C. Secy., Glenn Brown, Washington, D. C.

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SCRANTON ENGINEERS' CLUB.—On the evening of Sept. 15 the Scranton Engineers' Club held its first meeting this season, and listened to an illustrated lecture on "The De Laval Steam Turbine," by Mr. J. A. Lafore, of the D'Olier Engineering Co.

RAILROAD CLUB CONVENTION,—Tuesday, Sept. 27, 1904, has been designated as Railroad Club Day at the World's Fair, St. Louis. A union meeting of members of the railroad clubs of the United States and Canada is to be held at that time. The program will include a reception and exercises in the Transportation Building, in addition to other features of special interest.

FRANKLIN INSTITUTE.—The preliminary bulletin of announcements of lectures and papers to be presented before the Franklin Institute during the coming year will be issued within the next week. There will be a course of twelve popular lectures on scientific or technical subjects, weekly, in October and November, and January and February. The section meetings of the Franklin Institute will, as usual, be held on Thursdays, legal holidays being excepted. Mr. Wm. H. Wahl is secretary of the institute.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.—The first general meeting of the season was scheduled for the evening of Tuesday, Sept. 20, with a paper on "The Phipps Power Building," by Mr. G. E. Flanagan. This paper was abstracted in Engineering News of Sept. 8, 1904. The sections of the society open as follows: Chemical section, Sept. 22, 1904 (G. P. Maury, Secy.); Structural section, Sept. 27, 1904, "Modern Progress in Masonry Construction," by Mr. F. Z. Schellenberg (Willis Whited, Secy.); Mechanical section, Oct. 11, 1904, "The Steam Turbine," by Mr. R. N. Ehrhart (F. V. McMullin, Secy.).

OHIO GAS LIGHT ASSOCIATION.—In the twenty years since its formation, in 1884, this association has grown far beyond the boundaries of the state, and now is virtually national in its scope and includes all phases of gas engineering in its work. One of the methods by which the society does its work is the Question Box, which has been developing rapidly and is being energetically pushed for further progress. Mr. Henry L. Doherty, of 405 Seventeenth St., Denver, Colo., is Editor of this department. He invites questions on any part of gas work, and asks that all who wish to aid in answering questions submitted to communicate with him.

AMERICAN SOCIETY FOR TESTING MATERIALS.—A meeting of Committee A of the American Society for Testing Materials, on Standard Specifications for Iron and Steel, was held on Sept. 17 at the house of the American Society of Civil Engineers, 220 West 57th St., New York City, for the purpose of meeting Mr. Leslie S. Robertson, Secretary of the Engineering Standards Committee of Great Britain; Dr. Charles B. Dudley, President of the American Society for Testing Materials, occupied the chair. There were present at the meeting, as guests of the committee, a number of chairmen of committees of other societies concerned with work of a similar nature.

The chairman having called upon Mr. Robertson to explain the work of the committee, he briefly touched upon the work being carried on by the committee and the methods adopted by them. It appeared that the committee was first formed at the instigation of the Council of the Institution of Civil Engineers, to consider the advisability of standardizing rolled sections. The work of the committee gradually grew in scope and importance, and various new subjects were added from time to time. Mr. Robertson explained the constitution of the sub-committees, and the representative nature of their membership. The sub-committees are so constituted as to embody in them representatives of all the various interests affected, and where possible, this representation has been secured by official nomination and not by private selection. Various scientific bodies and trade associations have cooperated with the committee in its work. These specifications have been carefully discussed by the engineer and manufacturer meeting around the table of the institution, where any conflicting interests have been, as far as possible, amicably harmonized. The committee has published several reports, one of the most important being that on "Standard Test Pieces." The test pieces decided upon by the committee appear to go a long way toward solving the difficulties surrounding this much debated question. The test pieces were arrived at after the most careful investigation by several of the committees, and after exhaustive experiments by Professor Unwin and others.

Various speakers expressed their approval of these standard test pieces and their conviction that their general adoption in this country would mark a distinct step forward. It was the sense of the meeting that substitution of these standards for those now prevailing in this country was desirable.

It appears from Mr. Robertson's remarks that the Standards Committee has a large amount of valuable work in hand, and as the committee is supported by the British Government and the five leading technical societies in Great Britain, the results of its work will be awaited with great interest by the engineering profession not only in Great Britain but also in this country.

It will be seen from the foregoing that the British Engineering Standards Committee is proceeding on lines quite similar to those followed by the American Society for Testing Materials. Both recognize the desirability of according representation on their committees to all parties in interest, including the manufacturers. The work is distributed among numerous sub-committees, whose reports are submitted to the parent committee for revision and adoption.

Mr. Robertson is expected to meet members of several of the committees of the American Railway Engineering and Maintenance-of-Way Association, engaged on similar subjects, at a special meeting in Chicago on Sept. 29. The discussion of the general subject of standardization of methods of testing and of specifications governing the materials of construction will be continued at the International Engineering Congress in St. Louis, Oct. 3 to 8.

NEW YORK RAILROAD CLUB.—At the club's first meeting of the season, held on Sept. 16 at Carnegie Hall, 154 West 57th St., New York City, a paper was read by Mr. Gustav Lindenthal on the subject "Flange Wear and Side Bearings." This paper is reprinted on another page of this issue of Engineering News.

The discussion of the paper showed an appreciation of the theoretical study of flange friction given in the paper, but some doubt as to whether Mr. Lindenthal's solution of the problem, a rocker side-bearing truck, would prove satisfactory. Mr. L. H. Turner (P. & L. E. Ry.) expressed the opinion that the proper remedy must be one which can be applied to all existing trucks without any great changes, whereas the author's remedy is the substitution of a new truck. The Pittsburg & Lake Erie Ry. has for some years been experimenting with ball-bearing center and side plates under heavy freight cars, and the results were reported to be most encouraging. He quoted results of tests made on the Erie Ry. in 1900, and again very recently, on the effect of ball-bearing center and side plates upon tractive resistance, coal consumption, etc. Similar tests were made by the same railway on the effect of removing the side bearings in ordinary trucks, leaving the center bearings untouched. In this case a reduction in coal burned, per ton of freight, of 29.4% was found to result from the removal of the side bearings. The details of the tests were not reported, and it did not appear by what means the car body was held against tipping forces. In recent and very carefully conducted tests on the effect of ball-bearing center and side plates, compared with plain bearings, on a 32-mile run of which a ten-mile stretch was used for the calculations, it was found that the ball bearings permitted hauling 17% greater load with but 5% increase in drawbar pull. Reducing results to level track, the ball bearings gave 22% reduction in drawbar pull per ton of train.

Mr. J. M. Schoonmaker (P. & L. E. Ry.) remarked that Mr Lindenthal's truck involved, as its central feature, carrying the load near the sides of the truck. He believes it should be carried at the center, because this distributes the shocks of service with less straining of the parts. His ideal is a frictionless center bearing, rather than the frictionless side bearing. He also reported most gratifying results from the use of ball center and side bearings under heavy freight cars; flange wear is almost wholly absent, and the truck bearings show deterioration of wear. In these bearings the plates are dropforged of steel, while the balls are hardened steel. This is claimed to give the proper relation of hardness between plates and balls, so as to confine all wear to the plates.

Some further discussion brought out some skepticism on the subject of ball center bearings. Mr. G. W. West (N. Y., O & W.) gave it as his experience that the balls tend to imbed themselves in the plates, thereby destroying the "frictionless" action. Mr. L. R. Pomeroy (General Electric Co.) referred to observations made some years ago on the Michigan Central Ry., that balls having only partial rotation, as those in truck bearings, tend to wear flat rapidly and thus lose their usefulness.

The next meeting of the club will be held on Oct. 21, with a paper by Mr. J. M. Cherry on "Ferry Transportation." Secy., H. D. Vought, 62 Liberty St., New York.

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# CONSTRUCTION NEWS.

## PLANS AND SPECIFICATIONS ON FILE

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

| Bids close | Work. | Place. | On file. | See issue. |
|---|---|---|---|---|
| Sept. | | | | |
| •22 | Telephone line | Montrose, Colo | S | 8-18 |
| 24 | Frame dwellings | N. Orleans, La | S | 9- 1 |
| 24 | Steel work | Washington, D. C | S | 9- 8 |
| •24 | Dike, etc | Painted Post, N. Y | S | 9- 8 |
| 26 | Roads | Cooper, Pa | S. & B. S | 9- 1 |
| 27 | Roads | Erie, Pa | S. & B. S | 9- 8 |
| •27 | Rep'r'g jetties | New London, Ct | S | 9- 8 |
| •27 | Water mains, sewers | Kiel, Wis | P. & S | 9- 8 |
| Oct. | | | | |
| 1 | Floating pile driver | Wash., D. C | S | 9-15 |
| •5 | Gunnison tunnel | Montrose, Colo | P. & S | 8- 4 |
| •6 | Boiler | Wilmington, N. C | P. & S | 9- 8 |
| 8 | Brick building | New Orleans, La | S | 9-15 |
| 12 | Bridges | Chicago, Ill | P. S. & B. S | 9-22 |
| 15 | Foundry | Charleston, S. C | S | 9-15 |
| 15 | Dry-dock | Washington, D. C | S | 9- 1 |
| 15 | Towboat | Cuba | S | 8-18 |
| Dec. | | | | |
| **•1** | **Bridge** | **Manila, P. I** | **P., S. & B. S.** | **7-28** |

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•Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

## LIST OF CONTRACTS PENDING.

### LIGHT, HEAT AND POWER PLANTS.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| Sept. 23 | Motors, etc., Dayton, O | Sept. 8 |
| Sept. 26 | Power franchise, Suisun, Cal | Aug. 25 |
| Oct. 1 | Electric plant, Lexington, N. C | Sept. 22 |
| Oct. 3 | City lighting, Fargo, N. Dak | Sept. 22 |
| Oct. 4 | Street lighting, Saratoga Springs, N. Y | Sept. 22 |
| Oct. 4 | Street lighting, etc, Tamaqua, Pa | Sept. 8 |

### BRIDGES.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| Sept. 24 | Bridges, Rathdrum, Idaho | Sept. 22 |
| Sept. 26 | Bridge, New York, N. Y | Sept. 22 |
| Sept. 26 | Bridge, Olympia, Wash | Sept. 22 |
| Sept. 26 | Bridge, Santa Cruz, Cal | Sept. 22 |
| Sept. 26 | Bridge, Everett, Wash | Sept. 22 |
| Sept. 26 | Bridges, Fargo, N. Dak | Sept. 8 |
| Sept. 26 | Bridge, steel, Chesterfield, Va | Sept. 15 |
| Sept. 27 | Bridges, Indianapolis, Ind | Sept. 8 |
| Sept. 28 | Bridges, Indianapolis, Ind | Sept. 22 |
| Sept. 28 | Bridge, Marlboro, N. J | Sept. 22 |
| Sept. 28 | Bridge, steel, Ft. Wayne, Ind | Sept. 22 |
| Sept. 29 | Bridge, stone, Santa Fe, N. Mex | Sept. 22 |
| Sept. 29 | Bridge, steel, Green Bay, Wis | Sept. 15 |
| Oct. 1 | Bridge, Oshkosh, Wis | Sept. 15 |
| | Advertised, Eng. News, Sept. 15 and 22. | |
| Oct. 1 | Bridges, Cincinnati, O | Sept. 22 |
| Oct. 1 | Bridge, abutment, Fremont, O | Sept. 22 |
| Oct. 3 | Bridges, Brownstown, Ind | Sept. 22 |
| Oct. 3 | Bridges, Vicksburg, Miss | Sept. 22 |
| Oct. 3 | Bridge, Reedsville, Wis | Sept. 22 |
| Oct. 3 | Bridge, wood, Rome, Ga | Sept. 22 |
| Oct. 4 | Bridge, Conconully, Wash | Sept. 8 |
| Oct. 5 | Bridge, iron, Kittanning, Pa | Sept. 15 |
| Oct. 10 | Bridges, Toledo, O | Sept. 22 |
| Oct. 12 | Bridges, Chicago, Ill | Sept. 22 |
| Oct. 13 | Bridge, superstructure, Toledo, O | Sept. 22 |
| Oct. 30 | Bridge, steel, Crookston, Minn | Sept. 22 |
| Nov. 4 | Bridge, New Orleans, La | Sept. 15 |
| | Advertised, Eng. News, Sept. 15 to Oct. 7. | |
| **Dec. 1** | **Bridge superstructure, Manila, P. I** | **July 28** |
| | **Advertised, Eng. News, July 28 to Dec. 1.** | |

### BUILDINGS.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| Sept. 22 | Aviary, New York, N. Y | Sept. 15 |
| Sept. 22 | Library work, New York, N. Y | Aug. 18 |
| Sept. 23 | Library, Yankton S. Dak | Sept. 8 |
| Sept. 23 | Heating plant, Indianapolis, Ind | Sept. 15 |
| Sept. 24 | Heating & ventilating, Washington, D. C | Sept. 15 |
| Sept. 24 | High school, Orange, Cal | Sept. 15 |
| Sept. 24 | Brick buildings, Alexandria, La | Sept. 8 |
| Sept. 24 | Frame dwellings, New Orleans, La | Sept. 1 |
| Sept. 25 | Hotel, Twin Falls, Idaho | Sept. 22 |
| Sept. 26 | Fixtures, Springfield, Ill | Sept. 22 |
| Sept. 26 | Hall, Toronto, Ont | Sept. 22 |
| Sept. 26 | Buildings, Ft. Lincoln, N. Dak | Sept. 22 |
| Sept. 26 | Brick addition, Los Angeles, Cal | Sept. 8 |
| Sept. 26 | Buildings, Jackson, Miss | Sept. 8 |
| Sept. 26 | Stable, etc., Delaware City Del | Sept. 8 |
| | Advertised, Eng. News, Sept. 8 and 16. | |
| Sept. 26 | School, Boston, Mass | Sept. 15 |
| Sept. 27 | Court house, Wynne, Ark | Sept. 8 |
| Sept. 27 | Buildings, Mescalero N. Mex | Sept. 1 |
| Sept. 27 | Hospital addition, Ft. Leavenworth, Kan | Sept. 22 |
| Sept. 28 | Stonework, New York, N. Y | Sept. 22 |
| Sept. 28 | Three buildings, Portland, Ore | Sept. 22 |
| Sept. 29 | Fireproofing, Berkeley, Cal | Sept. 22 |
| Sept. 29 | Hotel, Boise, Idaho | Sept. 22 |
| Sept. 29 | Buildings, Ft. Leavenworth, Kan | Sept. 8 |
| Sept. 30 | Hall, Johnson City, Tenn | Sept. 1 |
| | Advertised, Eng. News, Sept. 1 to 22. | |
| Sept. 30 | School plans, Oakland, Cal | Aug. 25 |
| Sept. 30 | Buildings, Seattle, Wash | Sept. 15 |
| Sept. 30 | High school plans, Pt. Arthur, Tex | Sept. 22 |
| Sept. 30 | Gas fixtures, Montgomery, Ala | Sept. 22 |
| Oct. 1 | Court house plans, Manitowoc, Wis | Aug. 18 |
| Oct. 1 | School, Somerville, Mass | Sept. 1 |
| Oct. 1 | Cut granite, Washington, D. C | Sept. 8 |
| Oct. 3 | Church, Florence, S. C | Sept. 22 |
| Oct. 4 | Post office foundation, Kingston, N. Y | Sept. 22 |
| Oct. 5 | Building repairs, New York, N. Y | Sept. 22 |
| Oct. 5 | Brick buildings, Portsmouth, N. H | Sept. 22 |
| Oct. 5 | Post office, Pekin, Ill | Sept. 1 |
| | Advertised, Eng. News, Sept. 1 and 8. | |
| Oct. 5 | Building addition, San Francisco, Cal | Sept. 15 |
| Oct. 6 | School, Greenville, Miss | Sept. 15 |
| | Advertised, Eng. News, Sept. 15 and 22. | |
| Oct. 8 | Brick building, New Orleans, La | Sept. 15 |
| Oct. 8 | Buildings, New Orleans, La | Sept. 8 |
| Oct. 10 | Public buildings, Lawton, Okla | Sept. 1 |
| | Advertised, Eng. News, Sept. 1 to Oct. 6. | |
| Oct. 10 | Court house, Blakely, Ga | Sept. 22 |
| Oct. 10 | Brick buildings, etc., Mohave City, Ariz | Sept. 22 |
| Oct. 11 | Buildings, New Orleans, La | Sept. 22 |
| Oct. 12 | Post office, Fond du Lac, Wis | Sept. 8 |
| Oct. 15 | Brick building, Charleston, S. C | Sept. 15 |
| Oct. 15 | Foundry (mfg. plants), Charleston, S. C | Sept. 15 |
| Oct. 16 | Quarters, Fort Totten, N. Y | Sept. 22 |
| | Advertised, Eng News, Sept. 22 to Oct. 13. | |
| Oct. 17 | Government building, Portland, Ore | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 and 29. | |
| Oct. 18 | Post office, Nashua, N. H | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 and 29. | |
| Oct. 24 | Post office, Hammond, Ind | Sept. 22 |
| Oct. 26 | Post office, Rock Hill, S. C | Sept. 22 |
| Oct. 25 | Court house, Huntington, W. Va | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 and 29. | |
| Nov. 1 | School plans, etc., Birmingham, Ala | Sept. 15 |
| Nov. 2 | Ventilating apparatus, Washington, D. C | Sept. 8 |
| | Advertised, Eng. News, Sept. 8 and 15. | |
| Nov. 7 | Ventilating apparatus, Washington, D. C | Sept. 15 |
| Nov. 10 | Laboratory buildings, Washington, D. C | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 to Nov. 3. | |
| No date | Building materials, Mohave City, Ariz | Sept. 8 |

### WATER SUPPLY AND IRRIGATION.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| Sept. 22 | Water mains, reservoir, Waynesburg, O | Sept. 15 |
| Sept. 24 | Water-works improvements, Astoria, Ore | Sept. 1 |
| Sept. 26 | Water system, Denver, Colo | Sept. 8 |
| Sept. 26 | Water-works, Grimsby, Ont | Sept. 15 |
| Sept. 26 | Filtration plant, etc., Wilmington, Del | Sept. 15 |
| Sept. 26 | Water main system, Onarga, Ill | Sept. 22 |
| Sept. 26 | Water & light plant ex., Winthrop, Minn | Sept. 22 |
| Sept. 27 | Laying mains, Lakewood, O | Sept. 22 |
| Sept. 27 | Water mains, sewers, etc., Kiel, Wis | Sept. 8 |
| | Advertised, Eng. News, Sept. 8 to Sept. 29. | |
| Sept. 29 | Water-works and sewers, Emporia, Va | Sept. 8 |
| | Advertised, Eng. News, Sept. 8 to Sept. 29. | |
| Sept. 29 | Water pipe, New York, N. Y | Sept. 15 |
| Sept. 29 | Stand-pipe, Spring Valley, Ill | Sept. 15 |
| | Advertised, Eng. News, Sept. 15. | |
| Sept. 30 | Water-works, Parkers Prairie, Minn | Sept. 22 |
| Sept. 30 | Reservoir, Fort Meade, S. Dak | Sept. 15 |
| | Advertised, Eng. News, Sept. 15 and 22 | |
| Sept. 30 | Laying pipe, Cincinnati, O | Sept. 8 |
| Oct. 1 | Water-works, Savannah, Ga | Sept. 8 |
| Oct. 1 | Water-works, Chili | Aug. 25 |
| Oct. 4 | Water-works, Bordentown, N. J | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 and 29 | |
| Oct. 5 | Boiler, pump, etc., Fort Totten, N. Dak | Sept. 22 |
| Oct. 5 | Tunnel, etc., Montrose, Colo | Aug. 4 |
| | Advertised, Eng. News, Aug. 4 to Oct. 6. | |
| Oct. 10 | Water-works, Maumee, O | Sept. 15 |
| | Advertised, Eng. News, Sept. 15. | |
| Oct. 12 | Water-works, Covington, O | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 and 29. | |
| Nov. 1 | Water-works, etc., Summerside, P. E. I | Aug. 25 |
| Nov. 9 | Pumping machinery, New Orleans, La | Sept. 1 |
| | Advertised, Eng. News, Sept. 1 to Nov. 10 | |
| Nov. 17 | Pumping engines, Chicago, Ill | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 to Nov. 17 | |

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### SEWERAGE.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| Sept. 22 | Sewers, Cincinnati, O | Sept. 8 |
| Sept. 22 | Sewers, Morton Park, Ill | Sept. 15 |
| Sept. 24 | Sewers, plant, Centralia, Ill | Sept. 22 |
| Sept. 26 | Sewers, Cincinnati, O | Sept. 22 |
| Sept. 26 | Sewer, Chippewa Falls, Wis | Sept. 22 |
| Sept. 26 | Pipe sewers, Indiana, Pa | Sept. 22 |
| | Advertised, Eng. News, Sept. 22. | |
| Sept. 26 | Sewer, Wabash, Ind | Sept. 15 |
| Sept. 26 | Sewers, New York, N. Y | Sept. 15 |
| Sept. 26 | Sewers, Muncie, Ind | Sept. 15 |
| Sept. 26 | Sewer, Lafayette, Ind | Sept. 15 |
| Sept. 27 | Sewers, Akron, O | Sept. 22 |
| Sept. 30 | Trunk sewer, Salem, Mass | Sept. 22 |
| | Advertised, Eng News, Sept. 22. | |
| Sept. 30 | Sewer, Youngstown, O | Sept. 22 |
| Sept. 30 | Sewer, Albert Lea, Minn | Sept. 22 |
| Sept. 30 | Sewer system, Manasquan, N. J | Sept. 22 |
| Sept. 30 | Sewers, Omaha, Neb | Sept. 8 |
| | Advertised, Eng. News, Sept. 8 and 15. | |
| Oct. 1 | Sewer system, Savannah, Ga | Sept. 8 |
| Oct. 3 | Sewers, Topeka, Kan | Sept. 8 |
| Oct. 3 | Sewers, Northtown, Pa | Sept. 15 |
| Oct. 3 | Sewers, McKees Rocks, Pa | Sept. 22 |
| Oct. 4 | Sewers, Knoxville, Ia | Sept. 22 |
| Oct. 5 | Sewage screens, Columbus, O | Sept. 22 |
| Oct. 8 | Drains, etc., Cincinnati, O | Sept. 22 |
| Oct. 8 | Sewer system, Ft Barrancas, Fla | Sept. 22 |
| Oct. 10 | Sewers, Cincinnati, O | 22 |
| Oct. 20 | Sewer pipe, etc., Washington, D. C | Sept. 22 |
| | Advertised, Eng. News, Sept. 22 to Oct. 20. | |
| Nov. 1 | Sewerage, Summerside, P. E. I | Aug. 25 |

### STREETS AND ROADS.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| Sept. 22 | Paving, brick, Wellington, O | Sept. 15 |
| Sept. 23 | Paving, asphalt, Logansport, Ind | Sept. 22 |
| Sept. 23 | Road, stone, Wareham, Mass | Sept. 22 |
| Sept. 24 | Paving, etc., Morocco, Ind | Sept. 22 |
| Sept. 24 | Sidewalks, Elyria, O | Sept. 15 |
| Sept. 24 | Roads, Petersburg, Ind | Sept. 15 |
| Sept. 26 | Roads, Cooper, Pa | Sept. 1 |
| Sept. 26 | Paving, New York, N. Y | Sept. 22 |
| Sept. 26 | Sidewalks, Louisville, Ky | Sept. 22 |
| Sept. 26 | Road, Santa Cruz, Cal | Sept. 22 |
| Sept. 26 | Macadamizing, Cincinnati, O | Sept. 22 |
| Sept. 26 | Paving, Toledo, O | Sept. 22 |
| Sept. 26 | Paving, brick, Barnesville, O | Sept. 22 |
| Sept. 26 | Paving, etc., Wilkinsburg, Pa | Sept. 22 |
| Sept. 26 | Sidewalks, cement, Indianapolis, Ind | Sept. 22 |
| Sept. 27 | Paving, brick, Akron, O | Sept. 22 |
| Sept. 27 | Sidewalks, stone, Lakewood, O | Sept. 22 |
| Sept. 27 | Road work, Erie, Pa | Sept. 8 |
| Sept. 28 | Paving, Cincinnati, O | Sept. 8 |
| Sept. 28 | Paving, Hoboken, N. J | Sept. 8 |
| Sept. 28 | Paving, asphalt, Brooklyn, N. Y | Sept. 15 |
| Sept. 28 | Sidewalks, Indianapolis, Ind | Sept. 22 |
| Sept. 28 | Road, gravel, Kansas, Ill | Sept. 22 |
| Sept. 29 | Paving, Petersburg, Va | Sept. 22 |
| | Advertised, Eng. News, Sept. 22. | |
| Sept. 29 | Paving, brick, etc., New York, N. Y | Sept. 22 |
| Sept. 29 | Pikes, Bellaire, O | Sept. 8 |
| Sept. 30 | Sidewalks, Grand Island, Neb | Sept. 15 |
| Sept. 30 | Road, Peale, Pa | Sept. 22 |
| Oct. 1 | Sidewalks, concrete, Seattle, Wash | Sept. 22 |
| Oct. 1 | Sidewalks, Mansfield, La | Sept. 22 |
| Oct. 1 | Road repairs, Cincinnati, O | Sept. 15 |
| Oct. 3 | Macadamizing, Defiance, O | Sept. 15 |
| Oct. 3 | Road, Yuma, Ariz | Aug. 11 |
| Oct. 3 | Paving, etc., McKees Rocks, Pa | Sept. 22 |
| Oct. 4 | Paving, Clinton Heights, Pa | Sept. 22 |
| Oct. 4 | Roads, gravel, Brownstown, Ind | Sept. 22 |
| Oct. 5 | Macadamizing, Cincinnati, O | Sept. 15 |
| Oct. 7 | Grading, Ft. Leavenworth, Kan | Sept. 15 |
| Oct. 10 | Road, Wellsboro, Pa | Sept. 22 |
| Oct. 10 | Road, New Castle, Pa | Sept. 22 |
| Oct. 10 | Paving, Toledo, O | Sept 22 |
| Oct. 12 | Macadamizing, Cincinnati, O | Sept. 22 |
| No date | Sidewalks, etc., Brooklyn, N. Y | Sept. 22 |
| | Advertised, Eng. News, Sept. 22. | |
| **No date** | **Paving, brick, Morris, Ill** | **July 21** |
| | **Advertised, Eng. News, July 21 to Oct. 13.** | |
| No date | Sidewalks, concrete, Mansfield, La | Sept. 15 |

### MISCELLANEOUS CONTRACTS.

| Bids close. | Work. Place. | See issue. |
|---|---|---|
| **Sept. 22** | **Telephone system, Montrose, Colo** | **Aug. 18** |
| | **Advertised, Eng. News, Aug. 18 to Sept. 29.** | |
| **Sept. 22** | **Harbor improvement, Galveston, Tex** | **Aug. 25** |
| | **Advertised, Eng. News, Aug. 25 to Sept. 22.** | |
| **Sept. 22** | **Library stack work, New York, N. Y** | **Aug. 11** |
| Sept. 23 | Dam, Logansport, Ind | Sept. 22 |
| **Sept. 24** | **Dredging, Mobile, Ala** | **Aug. 25** |
| | **Advertised, Eng. News, Aug. 25 to Sept. 22.** | |
| **Sept. 24** | **Steel work, Washington, D. C** | **Sept. 8** |
| **Sept. 24** | **Dike and concrete wall, Painted Post, N.Y** | **Sept. 8** |
| | **Advertised, Eng. News, Sept. 8 and 15.** | |
| **Sept. 24** | **Remodeling wharf, Fort Mott, N. J** | **Sept. 8** |
| | **Advertised, Eng. News, Sept. 8 and 15.** | |
| Sept. 26 | Drainage canal, New Iberia, La | Sept. 15 |
| Sept. 26 | Drain, Hackensack, N. J | Sept. 15 |
| | Advertised, Eng. News, Sept. 15 and 22. | |
| Sept. 26 | Boiler, etc., Nat'l Military Home, Kan | Sept. 22 |
| Sept. 27 | Dam, Columbus, O | Sept. 22 |
| Sept. 27 | Ditch, levees, etc., Columbus, O | Sept. 15 |
| **Sept. 27** | **Repairing jetties, New London, Conn** | **Sept. 8** |
| | **Advertised, Eng. News, Sept. 8 to Sept. 29.** | |
| **Sept. 27** | **Wrought iron, etc., Washington, D. C** | **Sept. 8** |
| **Sept. 27** | **Machine tools, Washington, D. C** | **Sept. 1** |
| **Sept. 27** | **Dam, Cincinnati, O** | **Sept. 1** |
| | **Advertised, Eng. News, Sept. 1 to Sept. 29.** | |
| Sept. 28 | Ditch, St. Cloud, Minn | Sept. 8 |
| Sept. 28 | Retaining wall, Indianapolis, Ind | Sept. 22 |
| Sept. 29 | Dike work, etc., Albany, N. Y | Sept. 22 |
| Sept. 29 | Ammunition hoists, Norfolk, Va | Sept. 22 |
| Sept. 29 | Brick, Portland cement, New York, N. Y | Sept. 15 |
| Sept. 30 | Dredging, Portland, Me | Sept. 8 |
| **Sept. 30** | **Steel lock gates, Louisville, Ky** | **Sept. 1** |
| | **Advertised, Eng. News, Sept. 1 to Sept. 29.** | |

| | | |
|---|---|---|
| Sept. 30. | Mechanical stokers, Grand Rapids, Mich.<br>Advertised, Eng. News, Sept. 22 and 29. | Sept. 22 |
| Sept. 30. | Excavation, Crete, Ill. | Sept. 15 |
| Oct. 1. | Cut granite, Washington D. C.<br>Advertised, Eng. News, Sept. 1 to Sept. 29. | Sept. 1 |
| Oct. 1. | Telephone service, Toronto, Ont.<br>Advertised, Eng. News, Aug. 24 to Sept. 15. | Aug. 25 |
| Oct. 1. | Earthwork, New Orleans, La. | Sept. 15 |
| Oct. 1. | Floating pile driver, Washington, D. C. | Sept. 15 |
| Oct. 4. | Lamps, steel, etc., Washington, D. C. | Sept. 15 |
| Oct. 4. | Retaining wall, Boston, Mass. | Sept. 22 |
| Oct. 6. | Steam shovels, etc., Washington, D. C.<br>Advertised, Eng. News, Sept. 15 to Oct. 6. | Sept. 15 |
| Oct. 6. | Engines, generators, etc., West Point, N.Y.<br>Advertised, Eng. News, Sept. 8 to Oct. 6. | Sept. 8 |
| Oct. 6. | Boiler, Wilmington, N. C.<br>Advertised, Eng. News, Sept. 8 to Oct. 6. | Sept. 8 |
| Oct. 11. | Machine tools, Washington, D. C. | Sept. 15 |
| Oct. 11. | Dredging, Passaic, N. J.<br>Advertised, Eng. News, Sept. 15 to Oct. 13. | Sept. 15 |
| Oct. 12. | Embankment, Chicago, Ill. | Aug. 18 |
| Oct. 12. | Wharf, piers, etc., Jacksonville, Fla.<br>Advertised, Eng. News, Sept. 22 to Oct. 13. | Sept. 22 |
| Oct. 15. | Tug boat, Cuba | Aug. 18 |
| Oct. 15. | Plans for harbor, Sweden (Foreign) | April 21 |
| Oct. 15. | Completing dry-dock, Washington, D. C. | Sept. 1 |
| Oct. 15. | Dam, Hendrix, Pa. | Sept. 8 |
| Oct. 20. | Dump cars, cement, etc., Panama<br>Advertised, Eng. News, Sept. 22 to Oct. 20. | Sept. 22 |
| Oct. 22. | Railway construction, Brazil | Aug. 25 |
| Nov. 10. | Docks, moles and forts, Chili | Aug. 18 |

## RAILWAYS.

ALBUQUERQUE EASTERN.—Grading work on the railroad is to commence soon, according to General Manager W. S. Hopewell. Steel and other material has been purchased and is now en route. Last March the Secretary of Interior approved application for right of way through the San Felipe Indian Reservation for the coal branch of this road from San Felipe, N. Mex., to Hagan coal fields. Capital for construction has been secured. Project is reported to be backed by Pennsylvania Development Co.

BIRMINGHAM, COLUMBUS & ST. ANDREWS BAY.—L. E. Miller, of Philadelphia, has contract for an extension of this road from Chipley, Fla., to St. Andrews Bay, Fla., 60 miles. The road will be extended later to Birmingham, Ala., via Columbus, a total of 360 miles. Work will begin at once at Chipley, Fla. The company has filed for record in Alabama counties through which it will pass, a mortgage for $9,360,000, with the West End Trust Co., of Philadelphia, as trustee, securing a bond issue. We were informed recently by W. M. Gordon, Pres., Columbus, Ga., that surveys had been made and right of way and capital for construction secured. J. M. Garrett, Montgomery, Ala., is Ch. Engr.

BALTIMORE & OHIO.—Press reports states that this company will improve the terminals of the Cleveland, Lorain & Wheeling Ry. at Cleveland, O. This latter road is owned by the B. & O. It is said that Third Vice-President George I. Potter, General Manager C. S. Sims, Chief Engineer D. D. Carothers, General Superintendent W. C. Loree, of the Pittsburg Grand Division, and other officials recently made an inspection tour of this section. Extensions to dock and terminal facilities may aggregate in cost about $700,000. The coal dock will be the first improvement started. The present dock is located on the river above the Seneca St. bridge. Property belonging to the road lying on the old river bed will be developed by the construction of modern coal and ore machines with the necessary docks.

CHESAPEAKE & OHIO CANAL.—It is reported that State of Maryland will sell its interests in this company and is asking bids until Dec. 1. An officer of the company is reported as saying that the State sould sell its interests in the property, but would not guarantee those interests to the purchaser. The land for the route of the canal was originally condemned for a waterway and if used for any other purpose than that of a water transportation route, it will probably revert to the original owners. The Baltimore & Ohio Railroad has control of this waterway, which it is now operating under the direction of Second Vice-President U. S. Bond, Jr.

CHICAGO & ALTON.—Issuance of $5,000,000 of improvement bonds has been authorized.

CHICAGO, MILWAUKEE & ST. PAUL.—Large tracts of land have been acquired in Tacoma and in Seattle, Wash., by the Hanover National Bank, of New York. It is reported that this land is for the terminals of a new transcontinental railroad that is soon to be built and which will probably be utilized by the Chicago, Milwaukee & St. Paul. John T. Woodward, Pres. Hanover Bank, has also purchased land in Portland, Ore. It also is said that the line will be built from Chamberlain, S. D., to Seattle and Portland. The branch from the main line of the Milwaukee at Manilla, Ia., passes through Sioux City and terminates at Chamberlain, S. D. In case the new line is built this road probably will be resurveyed and instead of the line to Omaha being considered the main line through Iowa, the division west from Manilla to Omaha would be the branch and the main line would extend west through Sioux City and Chamberlain, S. D., to the coast. D. J. Whittemore, Chicago, Ill., is Ch. Engr.

DENVER & EL PASO SHORT LINE.—This is a new company that will construct an extension of the Santa Fe Central, running northward from El Paso, Tex., through Las Cruces, hence east and north around the Organ mountains to Willard station, on the Santa Fe Central, 210 miles of railway will be constructed at an estimated cost of $4,000,000. C. R. Moorehead, J. P. Dieter, of El Paso, are interested in the new line, also Senator W. H. Andrews, of Albuqueque, N. Mex.

FLORIDA.—Hon. Hoke Smith, of Atlanta, Ga., who, with other capitalists, desires to build a line of railway from Pensacola, Fla., to Andalusia, Ala., to connect with the Central of Georgia system, has been quoted as saying that all general propositions have been agreed upon and that right-of-way is practically assured. A committee consisting of F. C. Brent, H. L. Covington, John E. Stillman and W. C. Jones, in Pensacola, are working in the interests of the proposed road.

GREAT NORTHERN.—A. H. Hogeland, C. E., of St. Paul, Minn., is quoted as saying that A. Guthrie & Co., of St. Paul, have contract for building the extension from Mohall, N. D., northwest 14½ miles. Grading is in progress.

KENTUCKY & VIRGINIA.—This road, terminating at Stephen's Siding in Wise County, Va., 10 miles from the Kentucky border, will be extended to the Elkhorn coal fields in Letcher County, a distance of 20 miles.

MISSOURI PACIFIC.—This company has let a contract to Hammond & Jeffries for 104 miles of construction. There are seven tunnels to be built, and there are many heavy cuts and fills. One is 118 ft. deep and will be filled with stone. The contractors expect to complete the work in nine months. J. W. Way, St. Louis, is Consult. Engr. H. Rohrer, St. Louis, is Ch. Engr.

MORGANTOWN & KINGWOOD.—F. C. Bretz, Gen. Mgr., Morgantown, W. Va., writes us that this road will be extended from Bretz, W. Va., to Rowlesburg, 31 miles. Bids on construction work have been received but no contracts have been let as yet. Bids only cover distance of 15 miles. Survey for other 16 miles not yet completed. Equipment will be wanted. Julius K. Monroe, Kingwood, is Ch. Engr.

NEW YORK, NEW HAVEN & HARTFORD.—A Manchester, Conn., report states that engineers have furnished a survey designed to give a shorter route and lower grades between Manchester and Andover on the Highland division of the New Haven. It eliminates Vernon and Bolton from the main line. Provision is made for a tunnel through Bolton Mountain.

PAMLICO, ORIENTAL & WESTERN.—James A. Bryan and Walter W. Mills, of Raleigh, N. C., the promoters, are reported in New York on business connected with this road. Mr. Mills is quoted by local papers in saying that the length of the road will be 50 miles, extending from New Bern, N. C., to Goose Creek Island and Oriental, at both places connecting with deep water. A steamer will be put on from Goose Creek Island to connect with points across the sound. Sixty-pound rails will be used. Five miles of rail have been delivered, and the remainder will now be purchased. Total cost of the road will be $60,000; funds have been provided for it. It will be completed by July 1, 1905.

PARAGOULD & MEMPHIS.—French Quinn, Gen. Mgr., of Cardwell, Mo., is reported to have stated that this company, that now operates 24 miles of line from Cardwell to Manila, Ark., proposes to build several extensions. These are from Cardwell to Poplar Bluff, Mo., about 50 miles; from Cardwell to Paragould, Ark., about 12 miles; from Manila to Marked Tree, Ark., about 30 miles, and from a point near Manila to Osceola, Ark., about 16 miles; total, about 108 miles. No contracts have yet been let. W. E. Winn is Ch. Engr. Noted on Aug. 25.

RICHMOND, FREDERICKSBURG & POTOMAC.—Contract for the grading and masonry for large classification freight yard to be built by this company at Alexandria, Va., has been awarded to Reiter, Curtis & Hill. C. W. Haines is Ch. Engr., Richmond, Va.

SAN PEDRO, LOS ANGELES & SALT LAKE.—The Utah Construction Co., of Ogden, Utah, has been awarded contract for an additional section of this road from Las Vegas ranch to Goodsprings, Nev. Including double track, the contract covers 37 miles of work. Contract will be let for small portion of line beyond Goodsprings yet. H. Hawgood is Consult. Engr., Los Angeles, Cal.

TENNESSEE.—The Phillipsburg Land Co., of Albany, N. Y., will, it is reported, build a branch from the Tennessee Central Railroad to its property near Latana, Tenn., about 15 miles. R. W. Shannon, of Albany, N. Y., is Secy.; S. B. Gardner, Oneonta, N. Y.; F. M. Merwin, Brooklyn, N. Y., and W. L. McCracken, Brookeville, Pa., are interested.

THOMASVILLE & DENTON.—E. L. Propst & Co., Charlotte, N. C., inform us that they have been awarded contract for grading for seven miles of this road. The line will run from Thomasville to Wadesboro, N. C. Rail has been purchased for 15 miles. For further information address Milton Jones, Thomasville, N. C.

## STREET AND ELECTRIC RAILWAYS.

UXBRIDGE, MASS.—The Railroad Commissioners have granted permission to Uxbridge & Blackstone Street Ry. Co. to extend their system. Work will begin at once. C. L. Rogers, City, is superintendent.

BUFFALO, N. Y.—The Buffalo, Gardenville & Ebenezer trolley road has filed a certificate of intention to extend its track along the Ridge road from Abbott road to its eastern terminus at intersection of Buffalo & Aurora plank road.

PORT EWEN, N. Y.—A New York syndicate has opened negotiations for the building of an electric railway from Sleightsburgh to Port Ewen, with a terminal at the intersection of Riverside Ave.

CAMDEN, N. J.—The Camden & Trenton Traction Co. has asked the Township Committee for permission to construct a double track on Pavilion Ave., Riverside, which will probably be granted on condition that company pave the thoroughfare. H. V. Massey, Merrion, Pa., is president.

STEELTON, W. VA.—A charter has been issued for the West Virginia Interior Ry. Co. The company is capitalized at $100,000, and proposes to build a line from Steelton to extend south through the county seat of Wetzel, thence through Middlebourne to Salem. The promoters, some of whom are capitalists of Wheeling, intend to secure rights of way at once and commence work of construction at the earliest practicable time. The road will be 40 miles in length and will pass through a field that is rich in oil and agriculture. The motive power of the new line will be electricity or steam, or both.

PENSACOLA, FLA.—It is reported that an electric railroad will soon be constructed between this city and a point on Mobile Bay, from where connections will be had with Mobile by a line of steamers. It is said that work on the survey is going ahead rapidly, and that chances are good for the completion of the road during the next few months.

DAYTON, O.—The Wilmington-Hillsboro Co., of Dayton, was incorporated with $10,000 capital stock by Edwin G. Orr, Edward A. Fay, W. D. Riddell, F. E. James and A. J. Miller. They will build an electric road connecting Wilmington and Hillsboro.

EVANSVILLE, IND.—The Evansville & Henderson Traction Co., of this city, has incorporated with $10,000 cap. stock. Directors are: H. E. Randall, of Dayton; C. C. Tennis, Cincinnati; C. H. Batten, New Albany.

KALAMAZOO, MICH.—Arrangements have been completed for financing the Grand Rapids & Kalamazoo Valley Traction Co.'s new line. The directors have voted an issue of $1,600,000 bonds, which will pay for building 64 miles of road, including branches to Allegan and Gunn Lake.

EDGERTON, WIS.—The Southern Wisconsin Interurban Ry. Co. has filed an acceptance of franchise to build its line through this city, granted by the Council some months ago. The proposed line will run from Janesville to Madison via Milton Junction, Edgerton, Albion and Stoughton. Work of grading is to be commenced this fall.

DENVER, COLO.—The Continental Gold Mining Co. has been incorporated with $3,000,000 cap. stock. The company has planned the construction of an electric railway. Directors are W. W. Weaver, C. W. Weaver, Peter Savard.

PORTLAND, ORE.—Surveys for the Portland Southern Ry., which is to connect Portland with Salem by an electric road, with approximately 53 miles of track, and which will probably enter Portland over line of one of the present street railways, have been completed. Right of way has been secured for the greater part of the route.

*Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.*

## LIGHT, HEAT AND POWER PLANTS.

NEW YORK, N. Y.—New York Edison Co. has let contract for foundation of its new power house on 1st Ave. to Isaac A. Hopper & Son, Inc., 1170 Broadway, New York, for about $200,000. The station which will involve expenditure of between $4,000,000 and $5,000,000 is to be equipped to produce 112,000 HP. There will be 72 boilers, four brick stacks, two 50-ton traveling cranes, besides a large amount of electrical machinery.

SARATOGA SPRINGS, N. Y.—Bids are asked by Sewer, Water and Street Committee until Oct. 4 for furnishing gas or other illuminating substances for street and public lamps; also for lighting, extinguishing, cleaning and keeping in order street lamps in this village; bids are to be for arc lights of 1,200 and 2,000 c. p. and for gas and incandescent lights of 16 and 20 c. p. for term of 4 years from Oct. 4, 1904; 122 arc lights, 229 gas lamps, and 134 incandescent electric lights are now in use. H. F. Thomas, Clk.

WILLIAMSVILLE, N. Y.—Williamsville Natural Gas Co. has filed incorporation papers. Company has $50,000 capital. James W. Stearns, Akron, N. Y., and Lawrence P. Meyer, Bowmanville, N. Y., are interested.

NEWARK, N. J.—Contract for electric lighting of town of Kearny terminates in August, 1905. Resolution to install a municipal street lighting plant in Kearny, was adopted at recent meeting of Common Council, of that place. Lighting committee has been authorized to investigate the feasibility of construction of such a plant and the probable cost to the town. All electric light companies will be asked to submit bids for the new contract.

DALE, PA.—The Dale Light, Heat & Power Co. is reported organized, with Geo. E. Daniels, Pres., and Lincoln Messenger, Secy. Company has secured from the Borough Council right of way over the streets. The power house will be 75 × 380 ft. It will be erected on Bedford St.

WILKESBARRE, PA.—Colonel Ricketts, of this city, is reported to be making arrangements to build an electric light plant in Luzerne County. On his lands in the vicinity of the Long Pond there is a number of large swamps and he is now building dams to flood those swamps and the water will be led from these ponds to the foot of the mountain in Luzerne County in pipes, giving a fall of 800 ft., and furnishing power for an electric light plant. He proposes to furnish light for nearby towns in Luzerne and Columbia Counties.

WAYNESBORO, PA.—The Chambersburg, Greencastle & Waynesboro Electric Ry. Co. is reported to be considering the construction of a steam heating plant to supply heat to the residents of the borough. J. Mac Wolff is Gen. Mgr.

WILMINGTON, DEL.—Otto Gas Co. has been incorporated to manufacture gas in this city. Incorporators are John Salter, Jr., of Philadelphia; E. F. Burns, of Mt. Holly, N. J., and Erich Krell, of Narbert, Pa. Capital stock, $2,000. Geo. L. Townsend, Jr., of Wilmington, is counsel to company.

BALTIMORE, MD.—Bids were received on Sept. 14 for lighting about 6,768 city lamps. There were 12 different sets of specifications on which bids were asked, most of these being in the nature of alternate propositions. There were also four bidders, and each was asked to submit propositions on each of the 12 specifications separately for periods of one, two, three and five years. In the following summary the bids of each firm are given in order for these several bids. The bids were: (1) Care and maintenance of lamps, contractors to furnish labor for lighting and cleaning, city to furnish gas (the same plan under which lamps are cared for this year)—Welsbach Lighting Co. of America, one year, $13; two years, $13; three years, $12.75; five years, $12. L. S. Nicolai, $9.90, $9.90, $9.70 and $9.70; American Lighting Co. (present contractors), $9.50, $9.25, $9 and $9; National Lighting Co., $9, $9, $9 and $9. (2) Same as first plan, only contractors to substitute boulevard type of globes for present globes—Welsbach, $15, $14.50, $13 and $12.75; American, $11.50, $11.50, $11 and $11; National, $15.50, $15, $14.50 and $14. (3) Care and maintenance of lamps in parks and squares, contractors to furnish boulevard types of globes and labor, city to furnish gas—Walsbach, $14, $13.50, $12.25 and $12; Nicolai, $9.65, $9.65, $9.45 and $9.45; American, $9.50, $9.25, $9 and $9; National, $13, $12.75, $12 and $10.50. (4) Care and maintenance of bridge lamps, contractors to furnish boulevard type of globes and labor, city to furnish gas—Welsbach, $4.50, $4.50, $4 and $3.50; Niolai, $9.65, $9.65, $9.45 and $9.45; American, $9, $9, $9 and $9; National, $4.30, $4, $3.80 and $3.45.

LEXINGTON, N. C.—Bids are asked by Board Commissioners until Oct. 1 for erecting and installing electric light plant. Proposed plant embraces two 85-HP. high-speed engines, two 60-KW. A. C. generators, 50-light series arc system and pole line. For specifications, forms of proposals, etc., address J. L. Ludlow, Engr., Winston-Salem, N. C.

CLINTON, S. C.—City has voted to issue $25,000 of bonds for erection of water-works and electric light plant.

DUBLIN, GA.—Election will be held on Oct. 10 to vote upon proposition to issue $45,000 of bonds; $3,000 would be for improving electric light plant.

AMORY, MISS.—L. B. Camp, A. C. Thompson, J. N. Mullins, J. M. May and associates have organized company, with $8,000 capital, to establish electric light plant, it is reported.

NEW ALBANY, IND.—It is reported that the stockholders of the United Gas & Electric Co. have decided to issue $750,000 bonds to be used for the extension and improvement of plants in this city and Jeffersonville, and to acquire and improve plants elsewhere.

BENTON, ILL.—Municipal electric light plant here was burned. Loss, $10,000; insurance, $2,000.

SUMNER, IA.—Citizens have voted for electric light plant and one may be erected this year.

DES MOINES, IA.—It is reported that the Iowa Light, Heat & Power Co. proposes next year to expend about $125,000 on improvements to and extensions of its service.

DILLER, NEB.—The Acetylene Gas Co. has been incorporated here. Capital, $5,000. J. W. Fouts is Pres.

FARGO, N. DAK.—Bids are asked until Oct. 3 for lighting streets, public places and public buildings of this city for one year. H. T. Gibson, Cy. Audr.

DENVER, COLO.—The Northern Colorado Light & Power Co. has been incorporated with a capitalization of $500,000. The company plans to furnish power to mines, and for lighting towns and furnishing power to street railways in towns in Routt and other counties traversed by the "Moffat" road. Rodney Curtis, Charles M. Hoobs and Loren Curtis are interested.

EVERETT, WASH.—Application of Mr. Huffman, of Seattle, for a franchise for an electric light plant at Edmonds will be finally passed on at the next council meeting. It is said that it will be granted. Franchise calls for the completion of a plant capable of furnishing 15,000 c. p. by Jan. 1, 1905.

CHICO, CAL.—J. A. McFeeley has appropriated 12,000 ins. of the water of Deer Creek, to be used for creating power and electric energy and for irrigating and domestic use. A dam will be placed in the bed of the creek and the water will be carried a distance of about four miles by means of a flume and ditch.

VENTURA, CAL.—Board of Supervisors has granted to E. P. Foster, representing the gas company, a franchise to lay pipes to convey gas along county road to Oxnard. It also permits the laying of pipes to Montalvo and El Rio.

PHOENIX, ARIZ.—California capitalists are stated to be about to invest $2,000,000 in the C. M. Clark electric power project on the Salt Rover above Globe. It is reported that work will be commenced before the end of this year on a plant capable of furnishing 8,000 HP., and which will supply cities of Gila and Graham Counties. A 100 ft. high dam is to be installed on Cherry Creek, impounding a reservoir; a 30-ft. dam will also be built on Cherry Creek for diverting water into 7,000 ft. long tunnel. There will be eight miles of canal to the power house, which will be located one mile above mouth of Pinal Creek.

TORONTO, ONT.—Final papers granting full and exclusive water power rights on Koochiching Falls have been turned over to E. W. Backus, Minneapolis, Minn., President of Backus-Brooks Co. and Koochiching Co. Plans for dam construction have been approved, subject to survey of government engineers, which was begun early in September. Plans provide for a dam producing 32 ft. fall and capable of developing about 30,000 HP. J. T. Fanning, 603 Kasota Bldg., Minneapolis, Minn., is a Consult. Engr. on the matter.

BRYSON, ONT.—Marchand & Co., Ottawa, Ont., have acquired a water power here and contemplate lighting the villages of the district from this point.

MONTREAL, QUE.—Grand Trunk Ry. Co., according to reports, will substitute electricity for steam in the Sarnia Tunnel, and will install plant for that purpose, to cost $500,000. Jos. Hobson, Montreal, Que., is Ch. Engr., G. T. Ry.

## BRIDGES.

NEW YORK, N. Y.—Mayor McClellan has approved a bond issue of $400,000 for Blackwell's Island bridge.

NEW YORK, N. Y.—Bids are asked until Sept. 26 by Louis F. Haffen, Pres. Boro. Bronx, for constructing bridges and approaches over Port Morris branch of New York & Harlem R. R.

Plans for the Manhattan bridge as formulated by Bridge Commissioner Best were approved by the Municipal Art Commission. This means that wire cables will be used, and not eye-bar cables.

NEW YORK, N. Y.—The Board of Estimate has appropriated $10,000 for surveys as a preliminary to a first consideration of the proposal to build a bridge across Spuyten Duvil creek, to mark the tri-centennial of the Hudson River by Henry Hudson.

MARLBORO, N. J.—Bids are asked by committee of Board of Chosen Freeholders of Monmouth County at Mount Pleasant Hotel, Freneau, N. J., until Sept. 28 for building an iron bridge with 24 ft. span, 18 ft. roadway and concrete abutments in Marlboro township. Alfred Hardy, Chn. of Com.

NEWARK, N. J.—Bids will soon be asked by Park Commission for a steel bridge to be erected over Lehigh Valley R. R. tracks at Weequahic reservation. Cost, about $15,000.

BROOKVILLE, PA.—The contract for the erection of the iron bridge over Redbank creek, at Pickering St. crossing, was let by the state to Penn Bridge Co., for $59,983. Work will be commenced at once.

SHAMOKIN, PA.—It is reported that the Board of County Commissioners has decided to build a new bridge at Market St.

PHILADELPHIA, PA.—The following bids were received by Director of Public Works Costello: 33d St. bridge, Harmer & Quinn, $97,000; Millard & McGraw, $77,000; Henderson Co., $79,517; M. J. Hogan & Co., $87,000; Ryan & Kelly, $83,000. Erie Ave bridge over Port Richmond branch of Reading Railway, McCormick & Co., $55,617; Enos L. Seeds, $49,500; D. J. McNichol, $47,700; Henderson Co., $45,257; M. J. Hogan, $54,000; John McMenamin, $47,150; Wm. H. Quigg, $54,245; Ryan & Kelley, $49,000; Hoffman Engr. Co., $52,450; McGaw & Gray, $49,300; B. J. Boas, $53,800; Millard & McGraw, $48,700.

PHILADELPHIA, PA.—It is stated that the Board of Surveys has completed plans for a railroad bridge to be constructed near Allegheny Ave. and Ninth St.; appropriation available, $80,000.

ROANOKE, VA.—Norfolk & Western Ry. Co., L. E. Johnson, general manager, will build $10,000 viaduct.

HINTON, W. VA.—A certificate of incorporation has been granted the Hinton Tool Bridge Co., which proposes to build a bridge across New River here. The capital stock is $50,000 and the incorporators are O. O. Cooper, John R. Gott, J. A. Fox, Wm. Plumley and R. T. Dunlap.

CHARLOTTE, N. C.—The County Commissioners are preparing for the erection of a 300-ft. bridge over Pacolet River at site of former bridge washed away by floods of last year. Cost, $4,000.

NEWBERRY, S. C.—Supervisor Schumpert has announced that he will be ready on the last of this month to consider bids for the building of two bridges, one over Gilder's creek, on the Whitmire road, and the other over Indian creek.

ROME, GA.—Bids are asked by Commissioners of Roads and Revenue until Oct. 3 for building of a wooden bridge over Big Cedar Creek. G. E. Maddox, Clk.

MACON, GA.—A new $15,000 steel bridge is to be built by the Central of Georgia railroad over Walnut St. H. M. Steele, of Savannah, is chief engineer.

JACKSONVILLE, FLA.—An ordinance has passed the Council to issue bonds for $300,000, which includes $25,000 for building a bridge over Hillsboro River.

JACKSON, MISS.—Walter G. Kirkpatrick, Cy. Engr., has been authorized to prepare plans for a steel girder bridge over Town Creek, at Rankin St., to cost about $3,000.

VICKSBURG, MISS.—Bids are asked by J. D. Laughlin, County Clk., until Oct. 3 for building bridges over Bear Creek and Folke's Bayou road No. 113.

MAYSVILLE, KY.—It is stated that the Louisville & Nashville railroad has secured control of Maysville & Columbus railroad, the Ohio River & Columbus railroad and terminal and will build a bridge across the Ohio at this point. R. Montfort, of Louisville, is chief engineer.

TOLEDO, O.—Press reports state that bids will be received by County Commissioners until Oct. 10 for the following bridge work: Substructure, Central Ave.; substructure, Stickney Ave.; piling for a bridge over Ottar creek; two abutments, 1,900 ft. protection wall, Stickney Ave. All bids must be for sandstone or concrete.

FREMONT, O.—Bids are asked by County Commissioners until Oct. 1 for constructing one stone abutment for bridge over Green creek. County will furnish stone and cement at nearest railroad station. S. M. Fronizer, County Audr.

CINCINNATI, O.—Bids are asked by County Commissioners until Oct. 1 for concrete abutments and wooden superstructure on Kugler Mill Road, Symmes township. Eugene L. Lewis, County Audr.

MANSFIELD, O.—County Commissioners on account of numerous bridges destroyed by floods have decided to issue $25,000 additional bridge bonds.

TIFFIN, O.—The County Commissioners are reported to be considering the construction of an iron bridge over Sandusky River, in Seneca Township, to cost $10,000.

SPRINGFIELD, O.—Board Public Service adopted a resolution requesting City Council to provide funds for the erection of a new bridge over Buck creek on Water St.

CINCINNATI, O.—The County Commissioners by resolution condemned the west abutment and approach to bridge on Harrison pike spanning the Big Miami River near Miamitown. The bridge was partly destroyed by floods. The structure will be repaired at once.

TOLEDO, O.—Bids are asked by D. T. Davies, Jr., Audr., Lucas County, until Oct. 13 for constructing superstructure of bridge over Ten Mile Creek on Central Ave.

AKRON, O.—Council has adopted a resolution authorizing the Board Public Service to advertise for bids for the Mill St. viaduct.

INDIANAPOLIS, IND.—Bids are asked by Marion County Commissioners until Sept. 28 for building of several bridges. Cyrus J. Clark, County Audr.

BLOOMFIELD, IND.—The County Commissioners have awarded the contract for seven bridges in Greene County for $6,498, to Vincennes (Ind.), Bridge Co. Two of the bridges are to be in Stockton township, two in Stafford, two in Smith and one in Highland.

BROWNSTOWN, IND.—Bids are asked by Jackson County Commissioners until Oct. 3 for construction of three steel bridges, one wooden bridge, stone substructures for three bridges and two concrete arches. Plans and specifications on file in office of Asbury H. Manuel, County Audr.

BLUFFTON, IND.—The County Commissioners made an appropriation of $10,681 for the construction of 16 new bridges which will be built in Wells County during the next year. All are to be iron structures spanning small streams.

FORT WAYNE, IND.—Bids are asked by Allen County Commissioners until Sept. 28 for substructure of concrete and iron, steel bridge and concrete arch. Plans and specifications on file in office of J. L. Smith, County Audr.

INDIANAPOLIS, IND.—The City Engineer is making surveys at Senate Ave. and Fall Creek for the construction of a bridge. Since the old bridge at Northwestern Ave. is being replaced, the board has decided to put it at Senate Ave. Cost, $5,000.

INDIANAPOLIS, IND.—The County Council has made appropriation for 31 bridges to be erected in Marion County, ranging in price from $400 to $40,000. Bids will now be received for bridges over White River at Westfield gravel road; over Buck creek in Franklin township; over Eagle creek, Wayne township, and over White River at Broad Ripple.

GROSSE POINTE, MICH.—Residents have voted to issue $17,000 of bonds for repairing bridges over Fox and Connors creek.

CHICAGO, ILL.—Bids are asked by Clerk of Sanitary District, 1110 Security Bldg., until Oct. 12 for constructing bridges at Ninth and 16th Sts. Zina R. Carter, Pres. Bd. of Trustees. Plans and specifications on file in office of Engineering News, 220 Broadway, New York.

PEORIA, ILL.—Joseph Cody & Sons of Peoria have been awarded the contract for bridge across the Illinois River at this place for $225,000.

PEORIA, ILL.—The Road and Bridge Committee of Board of Supervisors, in conjunction with the Highway Commissioners of Jubilee township, let the contract for a new 75-ft. steel bridge over east branch of Kickapoo creek. The contract was awarded to Clinton (Ia.) Bridge & Iron Co., for $1,747. The bridge will have steel bulkheads, with 24-ft. wings on each side.

PEKIN, ILL.—The contract for a new bridge over Farm Creek, near Farmdale, was let by Bridge Committee of Board of Supervisors to J. M. Butler, of Deer Creek, for $1,800.

REEDSVILLE, WIS.—Bids are asked until Oct. 3 for the erection of a bridge over Mud Creek on Mill St, to span a 30-ft. waterway. Bids may be offered for a wooden bridge, stone bridge with iron railings, or iron bridge. A. B. Reichert, Village Clk.

MILWAUKEE, WIS.—Bids will soon be asked for a steel or concrete viaduct to be built over Menominee valley at the end of Grand Ave.

DES MOINES, IA.—Plans for the completion of Sixth Ave. Melan arch bridge will soon be ready for submission to City Council. The remaining two arches will cost $35,000, and although the contract may be let this year the money will not be available until new appropriations are made.

CROOKSTON, MINN.—Bids are asked until Oct. 30 by County Auditor for constructing a 200-ft. steel span bridge, with approaches, over Red Lake River, at Robert St., in Jeromes addition; probable cost, $10,000.

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WASHINGTON, IA.—A 300-ft. steel bridge w built across the Skunk River, near Rubis, this coun

WICHITA, KAN.—Contracts for five bridges been re-let by Board of County Commissioners. Co let to J. W. Burton last May have been declared fo and the Wichita Bridge & Iron Co. have been aw the contract. Work will begin at once. Total cost, 2

GRAND RAPIDS, NEB.—Three spans of th ng- ton railroad bridge across the Platte River wa oyed by fire. C. H. Cartlidge, Chicago, Ill., is bri ngineer.

OMAHA, NEB.—John Gilligan Co. was the lo bidder, at $5,234, for construction of a steel bridge Elkhorn River at Snyder's ferry.

SANTE FE, N. MEX.—Bids are asked by Cou m- missioners until Sept. 29 for construction of tone bridge across Santa Fe River on College St.

BILLINGS, MONT.—Yellowstone County Com on- ers have decided to build a bridge across Yel one River, 40 miles east of Billings. An order has be ade calling for an election to be held to vote bonds f 5,- 000 to construct the bridge.

JEFFERSON CITY, MO.—A concrete arch bridg ft. span and 40-ft. roadway, is to be constructed by et Commissioner. Plans are being prepared for on- crete arch bridge, 25-ft. span, 100 ft. wide. J. C ier- ring is city engineer.

EVERETT, WASH.—Bids are asked until Sept. for construction of a bridge across Snohomish River. t, $65,000. T. H. Mitchell, Cy. Clk.; W. D. Barkhu y. Engr.

EVERETT, WASH.—It has been decided by County Commissioners to rebuild the Jackson Slough bridge.

OLYMPIA, WASH.—Bids are asked by Thurston County Commissioners until Sept. 26 for construction of a bridge over Skookunchuck River. Geo. E. McKenzie, County Audr.

BELLINGHAM, WASH.—The County Commissioners awarded contract for construction of new steel bridge across Nooksack River at Marietta to the Puget Sound Bridge & Dredging Co. of Seattle, for $15,000.

EVERETT, WASH.—The City Council has decided to advertise for bids for a new bridge over Deadwater slough, to replace the present one, which is in a dangerous condition. Est. cost, $1,565.

RIVERSIDE, WASH.—Plans for the proposed bridge here have been accepted. D. D. Long, of Seattle, will be the consulting engineer.

PORTLAND, ORE.—Robert Wakefield has contract to build the bridge of nations at the Lewis & Clark fair grounds, his estimate of $27,266 being the lowest. Work will begin at once.

FOREST, ORE.—The contract for building the bridge across Crooked River, at Forest, has been let to J. H. Tillotson, of Portland. The bridge will be Howe truss, 20 ft. wide and 165 ft. long.

LOS ANGELES, CAL.—City Council has instructed the City Enginer to prepare plans and specifications for putting in concrete foundations under First St. bridge. Bids will soon be asked.

SANTA CRUZ, CAL.—Bids are asked by H. H. Miller, County Clk., until Sept. 26 for construction of a bridge on Shell Ave. in Pajaro Road district.

SAN BERNARDINO, CAL.—The County Board of Supervisors has ordered advertisements for construction of two steel bridges which will cost from $17,000 to $20,000.

STOCKTON, CAL.—The County Engineer was ordered by Board of Supervisors to prepare plans and specifications for steel bridges over Rock creek and on the Grant Line Road.

LOS GATOS, CAL.—The matter of building a new bridge was considered by Board of Trustees. Plans were submitted by J. G. McMillan, and John B. Leonard of San Francisco. Mr. McMillan's estimate for a composite bridge of three arches was $23,000. Mr. Leonard's estimate for a solid stone arch bridge was $32,000 and for an armored concrete bridge, $25,000. No decision was reached.

RATHDRUM, IDAHO.—Bids are asked by County Commissioners until Sept. 24 for building three bridges.

MONTREAL, QUE.—The Dominion Bridge Co., of Montreal, has closed a contract with the New Brunswick Southern Railway, for the manufacture and erection of steel bridges at Lepreau, Meadow Brook, Big New River and Lilly Brook crossings in New Brunswick. Inspection work will be in charge of the DeLano Osborn Engineering Co., of Toronto, Ont.

PEMBROKE, ONT.—McNab township will build a steel bridge over the Madawaska River, at Clay Bank, to cost about $12,000.

## BUILDINGS.

NASHUA, N. H.—Bids are asked by James Knox Taylor, Supervis. Arch., Treasury Dept., Washington, D. C., until Oct. 18 for the construction, including heating apparatus, electric wiring and conduits, of the U. S. Post Office. (Advertised, Engineering News.)

PORTSMOUTH, N. H.—Bids are asked until Oct. 5 for construction at marine barracks, navy yard, of a brick building, to be used for boiler house and bakery. F. L. Denny, Co., Q. M., U. S. Marine Corps, Washington, D. C.

SPRINGFIELD, MASS.—General contract for building White St. school was awarded to Daniel C. Shea, at $36,985.

NEW BEDFORD, MASS.—Contracts have been awarded for two schools, as follows: For 12-room schoolhouse to John B. Sullivan & Son, lowest bidder, at $51,900; heating and ventilating to W. H. & J. F. Whalen, of Fall River, lowest bidder, at $5,133. For 16-room schoolhouse, to H. A. Miller, lowest bidder, at $68,439; heating and ventilating to N. B. Boiler & Machine Co., at $7,700. This was not the lowest bid, but the difference between it and the lowest was but $113, and in view of the small difference the committee favored the local bidder.

SPRINGFIELD, MASS.—Bids are asked until Sept. 26 by Treasury Dept., Washington, D. C., for manufacturing and placing in position, in complete working order, in the Court House and Post Office Building, certain combination gas and electric light fixtures. H. A. Taylor, Acting Secy.

KINGSTON, N. Y.—Bids are asked by Treasury Dept., Washington, D. C., until Oct. 4, for construction of foundations of the postoffice here. James Knox Taylor, Supervising Archt.

PORT TOTTEN, N. Y.—Bids are asked until Oct. 16 for the construction, plumbing and electric wiring of one set of hospital sergeant's quarters. Capt. Geo. H. McManus, Con. Q. M. (Advertised, Engineering News.)

NEW YORK, N. Y.—Plans are reported in preparation by Paul Duboy and Louis Jallade, Archs., at 178 Fifth Ave., for a 10-story, 83 × 64 ft. apartment house to be erected at 35, 36, 37 and 38 Gramercy Park. Rathowsky & Simon, of 58 East Broadway, are the owners. It will cost about $180,000 and will contain all modern improvements. Bids will be asked about Oct. 1.

Plans have been filed for the enlargement of the Grand Hotel, at Broadway and 21st St., by making it an annex to the new $350,000 12-story fireproof hotel at 34 and 36 West 31st St.

Bids are asked by Board of Health, until Oct. 5, for alterations, additions and repairs to the office building of the Department at 900 Sixth Ave., Manhattan. Also for alterations, additions and repairs to the office building of the Department, at 38 and 40 Clinton St., Brooklyn. Thos. Darlington, is Pres. Dept.

Bids are asked by the Police Commissioner until Sept. [illegible], for erecting wood partitions in Borough Headquarters Building, 269 State St., Boro. Brooklyn. Wm. McAdoo, Police Comr.

Bids are asked until Sept. 28 by Martin W. Littleton, Pres., Brooklyn, Boro., for labor and materials necessary to alter and repair the exterior stonework of the Borough Hall, Brooklyn.

CAMDEN, N. J.—Ballinger & Perot, Archs., Philadelphia, have awarded to Kaighn & Draper, of Camden, the contract to build, at cost of $100,000, an addition to the main building and to construct a power house for the Victor Talking Machine Co., at Front and Cooper Sts.

PHILADELPHIA, PA.—Plans for branch libraries are in preparation, as follows: At Tacony, by Lindley & Johnson, Archs., Harrison Bldg., cost, $50,000; at Holmesburg, by Stearns & Castor, Stephen Girard Bldg., cost, $50,000; at Frankford, by Watson & Huckel, Archs., 1211 Walnut St., cost, $50,000.

ALTOONA, PA.—Bids were received as follows for erecting the high school: Altoona Construction Co., $233,374; George W. Carmichael, of Akron, O., $219,000; Constable Bros.' Co., of Erie, $244,973; Duquesne Construction Co., of Pittsburg, $230,179; W. V. Hughes & Son, Altoona, $199,720; Kruger & Co., Philadelphia, $212,406; M. V. Orner, Altoona, $215,804; Roydhouse, Avery Co., Philadelphia, $213,913; Vipond Construction Co., Altoona, $204,843. P. W. Finn, of Altoona, was awarded the contract at $197,900.

PITTSBURG, PA.—Thomas McConnell, City, will erect 35 brick dwelling houses on Gross St. Cost, $7,000 each.

T. J. Williams, City, will erect 20 modern dwelling houses in Lebanon Heights plan. Cost, $3,500 each.

Contract for cold storage plant for Pittsburg Terminal Warehouse & Transfer Co. was awarded to Carbondale Machine Co., Carbondale, Pa. Two refrigerating machines of 100 tons daily capacity each will be supplied, having a total of 1,500,000 cu. ft. refrigeration. Contract for engines, electric generators and switchboard awarded to Westinghouse Electric Mfg. Co. Three engines having a total of 1,000 HP. with reserve of 500 HP. will be furnished; also three generators of the same capacity. Contract for six boilers of 250 HP. each, awarded to the Babcock & Wilcox Co.

Morris Kaufmann, care of Kaufmann Bros., 5th Ave., will erect large apartment house on Forbes Ave., near Morewood Ave. Size, 60 × 100 ft. Architects are Vrydaugh & Wolfe, City. Plans have been drawn.

J. Palmer O'Neil, City, will erect ten dwelling houses in Ben Avon, Pa. Cost, $6,000 each.

The Hill Top Land & Improvement Co. will erect 25 additional dwelling houses in Montooth borough. Cost, $2,000 each.

Jas. Stewart & Co., Westinghouse Bldg., City, were awarded contract for erection of five-story business block for H. W. Oliver estate. Cost, $60,000.

ALLEGHENY, PA.—Henry M. Phillips, Secy. School Board, 11th Ward, will receive bids until Oct. 3 on construction of annex to Shady Ave. schoolhouse, also bids for annex building to Davis Ave., school. F. J. Osterling, Times Bldg., of Pittsburg, is Arch.

WASHINGTON, D. C.—The advertisement for bids noted in this column last week, that were to have been received until Nov. 7 by James Knox Taylor, Superv. Arch., Treasury Dept., for a mechanical ventilating apparatus and changes in connection therewith at the Treasury Building, has been withdrawn.

The Ontario Apartment House Co., of which Archibald N. McLachlen is Pres., is having plans prepared for additions to the Ontario apartment house, Lanier Heights, to be known as sections 2 and 3. The additions will be six stories high, of brick and stone, and thoroughly fireproof. Estimated cost, about $200,000. Hill & Kendall, Corcoran Building, are Archs.

WASHINGTON, D. C.—Bids are asked by the Building Committee, Department of Agriculture, until Nov. 10 for the general construction, except heating apparatus, elevators, electric wiring and conduit system, of two laboratory buildings. B. T. Galloway, Chn. Rankin, Kellogg & Crane, Archs., 1012 Walnut St., Philadelphia, Pa. (Advertised, Engineering News.)

BALTIMORE, MD.—Frank V. Newell, 78 La Salle St., Chicago, Ill., is reported to be the architect for a hotel that the National Hotel Improvement Co., of Chicago, will erect in this city at Baltimore and Charles Sts. Probable cost, $1,000,000. Preliminary plans for the new hotel have been prepared and a set of these are now in the hands of the George A. Fuller Co. Work of construction will not begin until March, it is said.

Revised plans of the new Church of the Messiah are reported to have been prepared by Charles E. Cassell & Son, who designed the first plans. Previously mentioned.

Arrangements are reported being made by a party of local capitalists to erect an apartment house on the east side of Maryland Ave. between 22d and 23d Sts. It is to be eight or nine stories high. Cost, $150,000.

Ellicott & Emmart, 323 North Charles St., Archs., are reported to have started plans for 11 warehouses to be erected at Lombard and Hanover Sts. for James E. Ingram.

Revised plans have been made by the city for fish and produce markets to be erected on Centre Market Space. The plans provide for 30 offices to be located over each of the markets. The cost of the buildings will be about $400,000.

William Lanahan & Son, wholesale liquor dealers, have commissioned Simonson & Pietsch, Archs., to prepare plans for a 6-story steel construction warehouse to be erected at 20, 22 and 24 Light St.

Henry Smith & Sons have contract for National Mechanics' Bank, to be erected at German and South Sts.

HUNTINGTON, W. VA.—Bids are asked by James Knox Taylor, Supervis, Arch., Treas. Dept., Washington, D. C., until Oct. 25 for the construction of the U. S. postoffice and court house, including plumbing, heating and ventilating, gas piping and electric wiring and conduits. (Advertised, Engineering News.)

ROCK HILL, S. C.—Bids are asked until Oct. 26 by Treasury Dept., Washington, D. C., for the construction (including plumbing, heating apparatus, electric conduits and wiring), of the postoffice at this place. James Knox Taylor, Supervising Arch.

FLORENCE, S. C.—Bids are asked until Oct. 3 for erection and completion of a brick church building for the Florence Presbyterian Church. Charles C. Wilson, Arch., 1302 Main St., Columbia, S. C. William Hoffmeyer, Secy.

MONTGOMERY, ALA.—Bids are reported to be asked until Sept. 30 by Treasury Dept., Washington, D. C., for furnishing and installing certain combination gas and electric light fixtures in Court House and postoffice here. C. H. Keep, Asst. Secy.

BLAKELY, GA.—Bids are asked until Oct. 10 for erecting a court house here. Morgan & Dillon, Archs., 707 Prudential Bldg., Atlanta. Building is to be two stories high, approximately 65 × 115 ft., of brick, stone and terra cotta, with metal and slate roof. John C. Chancy, Chn. Bd. of County Comrs.

TAMPA, FLA.—Council has called an election for Nov. 8, to enable the citizens to ratify its action in voting an issue of $500,000 of municipal improvement bonds. The bonding ordinance was passed on Sept. 13. It provides for the expenditure of $225,000 for street paving, $100,000 for sewerage, $100,000 for the purchase of a site and erection of a new city hall, $50,000 for a city hospital and $25,000 for a bridge over the Hillsboro river at Scott St.

OPELOUSAS, LA.—Pauly Jail Co., of St. Louis, Mo., has $35,000 contract for erecting a jail for this parish.

NEW ORLEANS, LA.—Bids are asked until Oct. 11 by Board of Control, Leper Home, 305 Hennen Bldg., New Orleans, for erecting new buildings, etc., at the Leper Home Indian Camp, Iberville Parish. MacKenzie & Torre, Archs., 407 Tulane-Newcomb Bldg., New Orleans. A. C. Phelps, Secy.

Capt. Salvatore Pizzati, has pledged $250,000 toward the construction of a hospital for Italians in this city. The Italian Societies are to raise the sum of $1,000,000 before the gift becomes effective.

FINDLAY, O.—Estimates will soon be taken on new government building for this city at Front St. and Court Place. Est. cost, $45,000.

GOSHEN, IND.—Elkhart County Council has appropriated $50,000 for remodeling and repair of court house at this place. Bids will now be received by the County Commissioners.

HAMMOND, IND.—Bids are asked until Oct. 24 by Treasury Dept., Washington, D. C., for the construction of postoffice and court house at this place. James Knox Taylor, Supervising Arch.

INDIANAPOLIS, IND.—Bids are being received by Brown & Davis, 433 Wabash Ave., Chicago, and Gillespie & Carrel, Associate Archs., 1123 Broadway, New York, for a church to be erected for First Baptist congregation, 90 × 164 ft., basement will be constructed first and heating and ventilating apparatus installed to be used for entire building. System to be selected from propositions submitted to architects. Figures are desired at once on heating and ventilating, and bidders on building have option of figuring basement or entire building. Total cost, $90,000.

MUNCIE, IND.—Jenney & Mundie, Archs., Chicago, have awarded the contract to Fred Illingworth, Muncie, for a hotel to be built for Harold P. Marks. It will be five stories, 120 × 120 ft., of semi-fireproof construction. Cost, $125,000.

FORT WAYNE, MICH.—Bids were received by Capt. P. Whitworth, Q. M., 1st Infy., for erecting buildings at this post: For administration building, guard house and officers' quarters: R. P. & E. O. Hamilton, 211 South 17th St., Omaha, Neb., were lowest bidders, at $29,647. Plumbing, gas fitting and heating for same: O'Connor Bros., Detroit, were lowest bidders, at $4,948.

KANKAKEE, ILL.—Lowest bid for construction of post office here was submitted on Sept. 12 by Newman & Hoy, of St. Paul, at $53,821.

EVANSTON, ILL.—A. L. Colcord, 108 Dearborn St., Chicago, Ill. has plans and is taking figures for 20 residences to be erected for C. F. Metcalf, care architect. Two-story buildings, 25 × 70 ft., stone and brick fronts. Cost, $150,000. Masonry and carpenter contract about to be let.

James Gamble Rogers, Ashland block, Chicago, has been engaged to prepare plans for a public library building to be built at Orrington Ave. and Church St. It probably will be two stories, 200 × 210 ft., of brick and stone, with tile roof, steam heat, electric light. Estimated cost, $100,000.

CHICAGO, ILL.—H. L. Newhouse, 4630 Prairie Ave., has completed plans and specifications for two flat buildings, containing 60 flats, to be erected at Sheridan road and Graceland Ave., for Collins & Morris, Chamber of Commerce Bldg. Three stories, 270 × 175 ft. Total cost, $230,000. It is said that owners desire figures on all work excepting masonry, which they will do by day's work.

Jenney & Mundie, 177 La Salle St., will prepare plans for 3-story addition to the 12-story National Life office building at 159 to 163 La Salle St., for the National Life Insurance Co. Cost, $250,000.

Same architects will let contracts shortly for a 4-story top addition, 79 × 90 ft., and a 16-story side addition, 30 × 90 ft., south and adjoining the Fort Dearborn building, at Monroe and Clark Sts., for J. H. Webster and B. I. Greenbaum, 1010 Fort Dearborn building. The total cost of the improvements is estimated at $300,000.

Same architects have prepared plans for a 2-story addition to The Fair department store building, State, Adams and Dearborn Sts. It will be 350 × 190 ft., have steel skeleton, pressed brick and terra cotta fronts, hardwood finish. Cost, $300,000. J. L. Kesner, Gen. Mgr., of The Fair, is reported to have stated that the roof will be raised and not taken off while the two stories are built underneath.

The George A. Fuller Co., 1027 Marquette Bldg., have contract for clubhouse to be built at 150 Michigan Ave., for the Woman's Athletic Club, Mrs. Pauline H. Lyons, Secy. Twelve stories, 80 × 171 ft., of fireproof construction. Cost, about $1,000,000. Work is to be begun at once and it is expected to have the building completed in about nine months. Holabird & Roche, Monadnock block, are Archs.

MILWAUKEE, WIS.—The plans of Buemming & Dick, 1107 Pabst Bldg., have been accepted for the North Side High School. Cost, $130,000.

***Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.***

BARABOO, WIS.—Contract for construction of court house has been awarded to Henry Ferge of Milwaukee, at $41,983.

DES MOINES, IA.—Capitol Improvement Commission has awarded contract to Elmer E. Garnsey, of New York, for the decoration of the state house at $61,500. This will be the complete decoration.——Bids were received as follows for repairing the Iowa State Capitol: Chas. Wretz Sons, Des Moines, $65,920; Capitol City Brick & Pipe Co., Des Moines, $64,900, and Grohl, Petersen and Hefmon & Son, Council Bluffs, $62,407. The latter firm was awarded contract. Chas. Wretz Sons, of Des Moines, has contract for coal bunkers for the boiler house, at $4,392. F. D. Harsh is Secy. Comn.

FORT LEAVENWORTH, KAN.—Bids are asked until Sept. 27 for constructing two additions to the post hospital at Fort Leavenworth, including plumbing, hot water heating, gas piping, and electric wiring. Maj. D. E. McCarthy, Q. M.

HOT SPRINGS, S. D.—The Dwyer Heating and Plumbing Co., St. Paul, has contract for heating work at the Battle Mountain sanitarium, at about $53,500, and the plumbing at about $22,000.

FORT LINCOLN, N. DAK.—Bids are asked until Sept. 26, for constructing brick fire apparatus building, brick shop building, frame wagon shed, addition to coal shed. Chase Doster, Q. M.

HAVRE, MONT.—Contract for Havre Hotel Co. was awarded to Lease & Richards, at $43,441.

LARAMIE, WYO.—Bids were received on Sept. 14 as follows for the construction of postoffice (not including heating apparatus): Newman & Hay, St. Paul, Minn., $94,426; W. O. Morrison, Denver, Colo., $98,500; John C. Robinson, Chicago, Ill., $99,436; Francis Calahan, Leadville, Colo., $89,880; J. W. Percival, Laramie, $121,500; Latimer & Bennings, Kansas City, Mo., $104,943.

KANSAS CITY, MO.—The South Side Christian congregation will erect a new church at a cost of $50,000. Van Brunt & Howe, 1214A Main St., are Archs.

EL PASO, TEX.—M. M. Rock, of Houston, has contract for union railway station here.

PORT ARTHUR, TEX.—Plans and specifications will be received by the board of school trustees until Sept. 30, for a fireproof 3-story high school, manual training school and commercial school combined. Said buildings to be of brick or stone, or both, to be heated by direct and indirect steam, ventilated by fan system and have Johnson automatic temperature and service regulation. The sum available for the complete erection, including heating, ventilating, plumbing, electric wiring and gas piping, but exclusive of architect's fees, movable furniture and equipment of laboratories, is $65,000.

PORTLAND, ORE.—Bids are asked by James Knox Taylor, Supervis. Arch., Treasury Dept., Washington, D. C., until Oct. 17 for the construction of the Government buildings. Lewis and Clarke Centennial Exposition. (Advertised, Engineering News.)

Bids are asked by Lewis & Clark Centennial Exposition Commission, room 6, Stearns Bldg., Portland, until Sept. 28, for construction of ((1) machinery, electricity and transportation building; (2) mining building; (3) festival hall No. 2. Address Edmond C. Giltner, Secy.

PORTLAND, ORE.—Bids for construction of a lighthouse keeper's dwelling at New Dungennes Station, Wash., are asked until Sept. 30, at the office of the lighthouse engineer, Portland, Ore. Maj. W. C. Langfitt, Corps of Engrs.

BERKELEY, CAL.—Bids are asked by Regents of the University of California until Sept. 29, for fireproof floors and roof and framing for skylight of California Hall on the grounds of the university. V. H. Henderson, Acting Secy.

LOS ANGELES, CAL.—Excavations are in progress at Spring and Fifth Sts., for the $800,000 hotel to be erected by Billicke-Rowan Fireproof Hotel Building Co. It will be fireproof with terra cotta partition walls and concrete floors, stairways of metal. Architect Parkinson has finished the details of the plans and bids will be received for the various construction contracts. The hotel is to be ready for business Jan. 1, 1906.

FORT MOHAVE, ARIZ.—Bids are asked by Department of the Interior, Office of Indian Affairs, Washington, D. C., until Oct. 10, for furnishing and delivering of the materials and labor required to construct and complete a brick hospital building with plumbing and acetylene gas-piping at the Fort Mojave School. Duncan D. McArthur, Supt., Mohave City. W. A. Jones, Comr.

FT. DOUGLAS, UTAH.—Bids were received by Capt. S. V. Ham, Constr. Q. M., Salt Lake City, for constructing guard house and barracks at this post as follows, it is reported:

Construction (a) guard house, (b) barracks: W. O. Morrison, Salt Lake City, (a) $20,660, (b) $58,770; G. W. Atkinson, (a) $19,800, (b) $58,890; W. Simpson, Denver, Colo., (a) $19,141, (b) $51,747; Allen & Roemisch, Salt Lake City, (a) $23,963, (b) $59,870; J. F. Schraven, Salt Lake City, (a) $22,266, (b) $52,276; A. J. Radebaugh, Salt Lake City, (a) $24,494 (complete, lowest bidder), (b) $61,867 (complete, lowest bidder); W. J. Dean, Salt Lake City, (a) $25,900, (b) $58,000. (1) Heating and (2) plumbing, (a) guard house, (b) barracks: Sexton & Co., Salt Lake City, (a1) $1,888, (b1) $5,749; Midgley Bros., Salt Lake City, (a1) $1,944, (a2) $2,242, (b1) $5,306, (b2) $6,765; J. M. Heighley & Co., Salt Lake City, (a2) $2,597; St. John Bros, Colorado Springs, Colo., (a1) $1,840, (a2) $2,400, (b1) $5,400, (b2) $7,560; Carthey & Dumbeck, Salt Lake City, (a1) $1,774, (a2) $2,452, (b1) $4,717, ((b2) $5,970; Doyle & Co., Salt Lake City, (a1) $1,993, (a2) $2,477, (b1) $5,243, (b2) $6,147.

BOISE, IDAHO.—Bids are asked until Sept. 29 by the Overland Hotel Co., Ltd., 805 Idaho St., for furnishing and erecting (except the foundations and basement walls), the Overland Hotel, at Eighth and Main Sts., six stories high, 100 × 122 ft., to be built of brick and stone.

TWIN FALLS, IDAHO.—Bids are asked until Sept. 25 by the Twin Falls Investment Co., Ltd., for furnishing material and erecting a 2-story brick and stone hotel, 90 × 114 ft. J. Flood Walker, Arch., Boise; R. M. McCollum, Secy.

VICTORIA, B. C.—The Puget Sound Bridge & Dredging Co., of Seattle, Wash., has been awarded the contract for the foundation construction, of the Canadian Pacific Hotel. Cost, $750,000. Contract for foundation is for about $100,000. F. M. Rattenbury, Arch., for the Canadian Pacific Ry. Co., is preparing plans and will receive bids for the main building when all plans have been completed.

TORONTO, ONT.—Bids are asked until Sept. 26 for all the various trades required in the erection of Convocation Hall, in Queen's Park, for the Toronto University. Darling & Pearson, 2 Leader Lane, Toronto.

## WATER SUPPLY AND IRRIGATION.

LAWRENCE, MASS.—Council has passed ordinance authorizing Water Board to enter in contract with town of Andover to supply this city with 50,000 gallons of water daily.

WORCESTER, MASS.—Mayor Walter H. Blodgett has signed order for laying 6,000 ft. 10-in. water pipe in Plantation Ave., to cost $12,056. Orders were also signed appropriating an extra $50,000 for Paxton reservoir repairs, work on which is now being done by the city, and $10,000 for pipe improvement throughout the city.

NEWBURYPORT, MASS.—B. F. Smith & Co., Boston, Mass., are to sink wells, looking to securing additional water supply for this city. Charles A. Bliss is Chn. Water Comrs.

PLAINVILLE, MASS.—Town is reported to have held meeting to vote on issue of $90,000 of bonds to establish water-works.

WEST SPRINGFIELD, MASS.—Contract for furnishing 11,000 ft. of water pipe for new Bear Hole water supply has been divided between M. J. Drummond & Co., New York, and Charles F. Miller, Utica, N. Y., each concern to furnish 5,500 ft.

WESTERLY, R. I.—Council passed order appropriating $4,000 for enlarging hydrants and other improvements.

PENN YAN, N. Y.—Chas. N. Kelly & Co., Penn Yan, was only bidder, Sept. 8, for constructing addition to pumping station, their bid being $3,290 for material and labor for additions, and $970 for engine and boiler foundations and cement floor.

ARCADE, N. Y.—Plant of Wyoming & Cattaraugus Water Supply Co., according to reports, is to be sold on foreclosure proceedings Oct. 28. B. B. Conable, Batavia, N. Y., is receiver.

BORDENTOWN, N. J.—Bids are asked by the Board of Water Commissioners until Oct. 4 for constructing a system of water-works, consisting of 49,385 ft. of 4 to 10-in. cast-iron pipe, constructing collecting drains, pump house and suction well; furnishing and erecting pumps and boilers and erecting a reinforced concrete tower with steel tank of 200,000 gallons capacity. David R. Brown, Pres. (Advertised, Engineering News.)

CONNELLSVILLE, PA.—H. C. Frick Co. is stated to have plans under way for two large reservoirs in southern part of Fayette County, to supply coke plants between Uniontown and Fairchance.

KUTZTOWN, PA.—Kutztown Water Co. has given $10,000 mortgage on its plant to meet expenses of building storage reservoir, intake, new well, relaying pipe, etc.

PITTSBURG, PA.—Benwood Water Co., Pittsburg, will lay 48-in. main across Ohio River, from Neville Island to Bellevue, Pa., and will also lay mains in McKees Rocks

CONESTOGA, PA.—Colemanville Water & Power Co. has placed its charter on record at county recorder's office. Company has $5,000 capital. Frederick Shoff, Colemanville, Pa., is interested.

McKEESPORT, PA.—Select Council has refused to submit to vote of citizens' proposition to issue $150,000 of bonds for filtration plant.

MERCER, PA.—Borough Council has authorized sinking of test well, and if sufficient supply is found property will be purchased for addition to water plant.

PITTSBURG, PA.—Contract for brick addition to pumping station of Pennsylvania Water Co. has been let to H. White, New Kensington, Pa.

DELAWARE CITY, DEL.—Bids are to be taken by Capt. Louis F. Garrard, Jr., Constructing Quartermaster, for construction of 30,000-gallon brick or concrete reservoir, installation of air compressor, 40 HP. boiler, 10 × 6 × 10 duplex steam pump, sinking of 8-in. artesian well and installation of distilling apparatus with capacity of 100 gallons, and also piping required for necessary connections. Work is to be done at Fort Du Pont, Del. Proposals for walls constructed of reinforced concrete will be accepted if accompanied by detailed drawings and specifications and guarantee that they will stand required pressure.

CLINTON, S. C.—Town votes to issue $25,000 of bonds for putting in water-works and electric light plant.

GREENVILLE, S. C.—City has accepted proposition of Paris Mountain Water Co., the latter agreeing to construct new reservoir and furnish additional supply of water.

DUBLIN, GA.—City will vote Oct. 19 on $45,000 bond issue, $15,000 of which is for extending water mains and sewer system.

COLUMBUS, GA.—Frank Sutter Co. has made proposition to build plant furnishing 3,000,000 gallons of water daily for $125,000. Under this offer water is to be brought to city limits and city is to build distributing system. Propositions were also received from L. B. Clay, Bartow, Ga., and C. F. Pekor, of Pekor Iron Works, for sinking artesian wells. L. H. Chappell is Mayor.

COLUMBIA, MISS.—Franchise for water-works and electric light plant is stated to have been granted M. & R. H. Hemphill, Hattiesburg, Miss.

GREENWOOD, MISS.—City has entered upon conduct of water-works, light and sewerage systems, recently purchased for $123,000. A. L. Dabney is Mgr.

BOYCE, LA.—T. W. Sylvester, C. E., Alexandria, La., is to design plant to be erected for this town at a cost of about $14,000.

MEMPHIS, TENN.—Following bids were received by City Secretary Sept. 1 for pumping machinery: Henry R. Worthington, pumps, motors and all discharge piping to Bayou, etc., $14,798; Camden Iron Works, pumps, motors and pipes in building, $10,985; piping and additional for vertical motor, $1,200; Engineering & Contractors' Supply Co., pumps, motors and piping in building, $12,065; piping and additional for vertical motor, $1,200; D'Olier Engineering Co., pumps, motors and all piping, etc., $16,695. Bid of Camden Iron Works was recommended for acceptance.

BOWLING GREEN, KY.—Charles Hermany, Consult. Engr., Louisville, Ky., is to prepare plans and specifications for 3,000,000-gallon pumping engine for this city.

MADISONVILLE, KY.—Town will vote Nov. 8 on matter of water-works. Est. cost is about $50,000.

CARLISLE, KY.—Council, it is stated, decided Sept. 13 to reject all bids for construction of water-works and to readvertise the work.

COVINGTON, O.—Bids are asked by the Board of Trustees of Public Affairs until Oct. 12 for a system of water-works, consisting of a brick pumping station, and about 400 tons of cast-iron water pipe, 5 tons of special castings, 52 fire hydrants, 35 gate valves and 35 valve boxes, 2 pumps of 750,000 gals. capacity each, one 50,00-gal. tank on steel superstructure 150 ft. high, and laying about 28,000 ft. of water pipe, etc. J. G. O'Donnell, Clk.; C. O. Lucas, Engr., Greenville, O. (Advertised, Engineering News.)

LAKEWOOD, O.—Bids are asked by Henry J. Sensel, Village Clk., Lakewood, Cuyahoga County, until Sept. 27 for laying water mains in five avenues and streets. William E. Evers Engineering Co., Arcade Bldg., Cleveland, Engrs.

MASSILLON, O.—Massillon Water Supply Co. has refused offer of city to purchase its plant for $200,000 and sets its value at $315,000.

NEW CASTLE, IND.—Reported that city will probably purchase new pump of 2,000,000 gallons daily capacity.

HOUGHTON, MICH.—Council is stated to have let contract for pipe line between new water-works reservoir, which Johnson & Latteral are now building, and Windmill Spring, to that firm for about $8,000. Village Engineer Clausen was instructed to get up a plan for the electrical pump, with an emergency steam engine attached, which will force the water from the windmill through this pipe line to the reservoir.

PLYMOUTH, MICH.—Town votes to issue $15,000 of bonds for public improvements, most of which will go for water-works.

JACKSONVILLE, ILL.—C. U. Mackey, New York City, and O. N. Gardner, Jamestown, N. Y., have submitted to Council plan to supply water from the Illinois River. They propose running a pipe line to Bluffs, a distance of 18 miles, and from a pumping station there to force water to force water to this city.

CHICAGO, ILL.—Bids are asked by the Department of Public Works until Nov. 17 for designing, furnishing and erecting in each of the Central Park Ave. and Springfield Ave. pumping stations one vertical triple expansion pumping engine, each having a capacity of 40,000,000 U. S. gallons of water per 24 hours, with all necessary appurtenances. F. W. Blocki, Comr. (Advertised, Engineering News.)

ONARGA, ILL.—Bids are asked by Board Local Improvements until Sept. 26 for construction of system of water mains, requiring 2,870 ft. of 6-in. mains, of which about 800 ft. are now laid and about 700 ft. additional on the ground, these to be purchased by the successful bidder; 13,400 ft. 4-in. main; 11 4-in. gate valves with boxes; 39 fire hydrants with two 2½-in. nozzles, 4 ft. bury and 6-in. connection to main, four of these are now in place and to be purchased by the contractor; 8,000 lbs. of lead; 9,000 lbs. of special castings; 1,000 lbs. yarn. Bids will be considered for material f. o. b. Onarga, and for labor item alone. Joseph D. Wallace, Engr., Champaign, Ill.; Ira F. Palmer, Pres.

EAST PEORIA, ILL.—Village is considering establishment of fire protection system. (Post Office, Peoria.)

GARRISON, IA.—We are informed that action has been taken to call election to vote on matter of water-works. E. A. Graves is Mayor.

MT. AUBURN, IA.—John C. Roster writes us that there is not much prospect of water-works being installed here. Population is 250.

MUSCATINE, IA.—City will vote Oct. 10 on $60,000 bond issue for improving water-works. If favorable action is taken bids will be called for laying force main; foundation, basement and the ground water supply; cement, mortar and concrete work; cast-iron water pipes; hydrants and valves; construction of the extension; bids on the machinery of the plant; and the boilers. R. S. McNutt is Mayor.

PARKERS PRAIRIE, MINN.—Bids are asked by A. J. Campbell, Village Recdr., until Sept. 30 for construction of water-works system.

NORTHOME, MINN.—Village was to sell, Sept. 20, a $6,000 water-works bond issue. Geo. H. Sheire is Village Recdr.

MINNEAPOLIS, MINN.—The Pure Water Commission in its report to Council recommends establishment of sand filtration plant north of present reservoirs. The cost of the plant is estimated as follows: First, handling earthwork, $74,000; concrete masonry, 47,500 cu. yds., at $8, $380,000; filtering materials, sand and gravel, 82,000 cu. yds., $2 a yard, $186,000; pipes, grates, drains, houses and all purposes, $200,000; total for filters, $840,000. Covered pure water reservoir, holding 20,000,000 gallons, $190,000; new 6-in. pipe line, $78,000; land, pipes, drains, etc., $52,000; engineering and contingency, 10%, $116,000; total cost, $1,276,000. The Commission was composed of F. W. Cappelen, Allen Hazen, New York, and Andrew Rinker, Cy. Engr.

WINTHROP, MINN.—Bids are asked by Village Council until Sept. 26 for material and labor of extending water-works system and for enlarging and extending electric light plant. C. A. Schilling, Village Recdr.

BEEMER, NEB.—Town votes to issue $6,000 of bonds for water-works. J. H. Stoetzel is Chn. Trustees.

CLARK, S, DAK.—Contract for constructing water-works here to cost between $25,000 and $30,000 is stated to have been let to National Construction Co., South Bend, Ind.

FORT TOTTEN, N. DAK.—Bids are asked until Oct. 5 for furnishing U. S. Indian School, Fort Totten, 80-HP. boiler, duplex pump, feed water filter, two steam traps, 2,350 ft. assorted pipe and 640 ft. asbestos covering. Charles L. Davis, Supt.

MUSKOGEE, IND. T.—Burns & McDonnell, 509 Dwight Bldg., Kansas City, Mo., are to prepare plans and specifications for improving water-works and sewerage.

City voted Sept. 1 to issue $100,000 of additional bonds for extending water-works and sewer systems.

CORSICANA, TEX.—Municipal ownership of local water-works is under consideration.

ROCKY FORD, COLO.—Arkansas Valley High Line Land, Loan & Trust Co. has purchased for $150,000 a 40-ft. water right from the Arkansas Valley Co.

MONTROSE, COLO.—Bids were received by U. S. Reclamation Service, Sept. 15 for construction of South Canal of Uncompahgu Valley project. Work was divided into nine sections, and the following were the lowest bidders for the sections: Knowlton & Bollen Construction Co., Fort Collins, Colo., Sec. 1, $7,907; Sec. 2, $6,450; Sec. 7, $7,510; Sec. 8, $7,870; Sec. 9, $9,930. Orman & Crook, Pueblo, Colo., Sec. 3, $9,010; Sec. 4, $9,635; Sec. 5, $10,140. Kellog & Worley, Gunnison, Colo., Sec. 6, $7,060.

ROSWELL, N. MEX.—Bids were received by U. S. Geological Survey, Reclamation Service, Sept. 6 for construction of reservoir, canals, gates, etc., Hondo project, near this place. W. M. Reed, Engr. Work was divided into six sections and the following are the [illegible] bids received for the whole work: Taylor-Moore Construction Co., Hillsboro, Tex., $127,476; Wood, Bancroft & Doty, Omaha, Neb., $174,897; Maney Bros & Spencer, Oklahoma City, Okla., $176,795; Orman & Crook, Pueblo, Colo., $159,766; Carroll Construction Co., St. Louis, Mo., $236,580; W. W. Atkinson, Colorado Springs, Colo., [illegible]; De Remer & Olson, Denver, Colo., $957,001 (bids not allowed). Whitescarver Construction Co., Trinidad, Colo., three sections, total, $79,035; Cazier Construction Co., Roswell, N. Mex., three sections, total, $110,89[illegible]; [illegible]kard Construction Co., Roswell, N. Mex., four sections, total, $141,014 (bids not allowed); F. C. Youmans, Kansas City, Mo., one section, $27,492. Itemized bids will be [illegible] under Contract Prices.

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ROCKFORD, WASH.—J. B. Gilbert, Clk., writes that town will probably issue bonds for constructing water-works. Supply is to be from artesian well and est. cost of system is $10,000. Engineer had not been selected at time of writing.

SEATTLE, WASH.—Resolution has been before Council to construct water main from Western Ave. and [illegible] St. to Interbay and Ross. Est. cost is about $75,000. [illegible] H. Thomson is Cy. Engr.

TACOMA, WASH.—Details are to be submitted to Council soon for putting in new water system in South Tacoma capable of furnishing from 15,000,000 to 20,000,000 gallons.

BELLINGHAM, WASH.—T. W. Gillette, of Fairhaven Water Co., is stated to have submitted proposition to Council to connect company's mains with mains of city, and to put in new hydrants and larger mains in business section.

HOOD RIVER, ORE.—Hood River Electric Light, Power & Water Co. will make a proposition to supply the city with water, according to reports.

OROVILLE, CAL.—Supervisors have granted to M. N. Sheldon, for the Butte County Canal Co., franchise for constructing an irrigating ditch in the Biggs and Gridley sections, in Butte County.

REDDING, CAL.—It is stated that Shasta Power Co., by Harry L. Shannon, intends to install a water system here. It is proposed to drill ten wells, the water from which will be pumped to all portions of the city.

SACRAMENTO, CAL.—Appropriation of $8,000 for suction pipe and $25,000 for water mains have been recommended to action of Trustees.

SAN DIEGO, CAL.—Geo. A. d'Hernecourt, Cy. Engr., has filed with Secretary Board Public Works estimate setting cost of installing pumping plant on Sexton Tract, Mission Valley, at $31,514.

DAGGETT, CAL.—T. S. Van Dyke is reported interested in project to construct pipe line, costing $20,000, from Mojave River to Daggett, to furnish water to the town and the Salt Lake R. R.

STOCKTON, CAL.—It is stated that Stockton Water Co. intends to bore a 12-in. well on its property this winter. Geo. C. Turner is Engr.

SAN FRANCISCO, CAL.—Prof. Samuel Fortier, of the University of California Irrigation Department, Berkeley, Cal., has been appointed consulting engineer of the improvements connected with the Turlock canal, and will draw the plans and specifications for work which will cost in the neighborhood of $200,000.

SAUSALITO, CAL.—Sausalito Bay Water Co. has sold its entire water business to capitalists who intend to expend this fall about $15,000 in enlarging the plant. New tunnels are to be dug, extra tanks and mains constructed and a large engine will take the place of the one now being used in South Sausalito. A main will be placed through the entire length of Water St. W. B. Gilbert, Sausalito, is interested.

PRESCOTT, ARIZ.—Constructing Quartermaster, Whipple Barracks, Prescott, writes that all bids for construction of water distributing system and reservoir at that post have been rejected and the work will be readvertised.

SALT LAKE CITY, UTAH.—Frank L. Hines, Supt. W.-W., is stated to have recommended that Council purchase and install 5,000 meters.

MONROE, UTAH.—Committee, Alma Bohman, Member, is considering proposition for water-works for this town.

NORTH BAY, ONT.—We are informed that tenders will probably be opened Oct. 8 for proposed extensions to water system and change of source of supply, to be made at estimated cost of $35,000. Work will require 15,000 ft. 10-in. cast-iron pipe, 500 ft. 12-in. intake, with some flexible joints, necessary air valves, gate valves, blow-offs and specials; pump house, dwelling, 75-HP. boiler, steel stack and removal of present plant will be required. L. O. Clark, Town Engr., is Des. Engr.

TORONTO, ONT.—Contract for laying 6-ft. steel conduit from lake shore, across the Island to Hanlans Crib, has been let by Board of Control to Frank Simpson, Toronto, for $84,745.

NANAIMO, B. C.—Council is stated to be seeking additional water supply, with intention of spending about $30,000 on projected improvements.

TROUT LAKE, B. C.—Trout Lake Water Supply Co. has been organized here to construct water-works.

SHAWVILLE, QUE.—Village Council has been petitioned to submit by-law to raise funds for constructing water-works.

## SEWERAGE.

SALEM, MASS.—Bids are asked by the Sewerage Commission until Sept. 30 for the construction of two sections of the North River Trunk Sewer, consisting of about 1,735 ft. of 60-in. and 2,170 ft. of 52-in. sewers. Joseph N. Peterson, Chn. (Advertised, Engineering News.)

MANASQUAN, N. J.—Bids are asked until Sept. 30 for constructing about 4¾ miles of terra cotta pipe sewer, varying from 6 ins. to 12 ins., together with manholes, inspection holes, brick tidal tank, iron outlet pipe and anchor. F. B. Woolley, Mayor. Willis A. Mount, Boro. Clk. Pugh & Hubbard, Engrs., 1334 Real Estate Trust Building, Philadelphia.

DRAVOSBURG, PA.—Council will issue $13,000 of bonds for sewer construction.

WILLIAMSPORT, PA.—Campbell St. sewer contract was awarded to Busch & Stewart, at $3,264.

INDIANA, PA.—Bids are asked until Sept. 26 for 11,000 ft. of 6-10-in. pipe sewers. John B. Taylor, Treas. R. Mullen, Engr. (Advertised, Engineering News.)

READING, PA.—Proposition to issue $945,000 of bonds for permanent improvements will be voted upon in November. William J. Rourke is Cy. Solicitor.

PHILADELPHIA, PA.—Peter E. Costello, Dir. Pub. Wks., has awarded following contracts for sewer construction: Extension of McKean St. sewer, to Harold E.

Rush; appropriation, $30 000. Extension Shunk St. system to David Peoples; appropriation, $75,000. Frankfort intercepting system on Wakeling St., to free Little Tacony creek from pollution, to Robert Higgins; appropriation, $75,000. 60th St. sewer, Cobbs creek to Trinity St. to McCormick & Co.; appropriation, $25,000. Extension Wingohocking sewer at North Penn Railroad, to David Peoples; appropriation, $20,000; branch of Indian Run sewer, to Robert Higgins; appropriation, $12,000; Eastwick Ave. sewer, from 64th St. to 60th St., to Gibson Ave., to Robert Higgins; appropriation, $30,000 Lucerne St. sewer, through ground of new Municipal Hospital to John McMenamy; appropriation, $3,000.

McKEES ROCKS, PA.—Bids are asked at office of Borough Clerk, 815 Chartiers Ave., until Oct. 3 for constructing about 1,800 lin. ft. 12 and 15-in. sewer in portions of Burkhart St. and Railroad St. S. L. Gardner, Boro. Engr.

WILKINSBURG, PA.—Frease & Sperling, Borough Engineers, will receive bids until Sept. 26 on building [illegible]-in. sewer on Chestnut St. and 6-in. circular brick sewer on Franklin Ave.

WASHINGTON, D. C.—Bids are asked by the Isthmian Canal Commission, Washington, D. C., until Oct. 20 for furnishing sewer pipe and cement, sewer pipe 4 to 24 ins. in diameter,, for the sewerage system. J. G. Walker, Chn., Evening Star Bldg. (Advertised, Engineering News.)

GREENVILLE, S. C.—Washington St. sewer will be built at cost of $3,000. About 3,835 ft.

DUBLIN, GA.—City will vote on Oct. 10 on issuance of $45,000 of bonds for public improvements as follows: $20,000 for city hall; $15,000 for extending water mains and sewer system; $5,000 for improving fire department; $3,000 for improving electric light plant; $2,000 for building annex to school building.

COVINGTON, KY.—City will issue $50,000 of bonds for improving sewer system. W. E. Gunn is Cy. Engr.

HOPKINSVILLE, KY.—City will vote in November at regular election on issuance of $50,000 of bonds for construction of sewer system. Septic tank system is being considered. B. F. McClaid is Cy. Engr.

MEMPHIS, TENN.—Bids were received here Sept. 1 for construction of low level sewers and high level sewers in North Memphis. Bids of Weatherford & Carey Bros., at $30,483 and $20,059, respectively, were recommended for acceptance.

NASHVILLE, TENN.—T. V. Barnsfield was awarded contract for building Sandy Bottom sewer extension, at $4,471. J. T. Allen & Co. was awarded contract for Fairfield Ave. extension at $1,090.

FORT BARRANCAS, FLA.—Bids are asked until Oct. 8 for constructing sewer system at this post. W. E. Cole, Q. M.

AKRON, O.—Bids are asked until Sept. 27 for building sewers in portions of several streets. Charles H. Watters, Secy. Bd. Pub. Service.

MANSFIELD, O.—Property owners on Penn Ave. have petitioned for an 8-in. lateral sewer in that street.

TOLEDO, O.—Board of Public Service will receive bids until Sept. 26 for construction of an extension to sewer No. 10 in Madison Ave.

COLUMBUS, O.—Owing to an error in the lowest bid after the contract had been awarded, it was necessary for Board to reject all bids after reconsidering the award. Secretary has been instructed to advertise for new bids for the sewage disposal plant. We were informed by Julian Griggs, Ch. Engr., Bd. Pub. Service, that Samuel A. Eswein, Columbus, was awarded contract, at $46,500, for furnishing and erecting complete the pumping plant for the main sewage pumping station, consisting of three 11,000,000-gallon and two 4,000,000 centrifugal pumps, each connected to a vertical compound condensing engine, two 10-KW. direct current generator connected to simple engine, one switch board, one hand 6-ton traveling crane, three horizontal 150-HP. water tube boilers, two surface condensers, two air pumps, two boiler and feed pumps, etc., as advertised for in Engineering News.

CINCINNATI, O.—Bids are asked by Board of County Commissioners until Oct. 8 for constructing drains, box culverts and approaches on the Skillman road, Springfield township. Eugene L. Lewis, County Audr.

LORAIN, O.—Bids will be received Oct. 3 by the City Council for $21,000 sewer bonds. J. J. Mahony is City Audr.

COLUMBUS, O.—Bids are asked until Oct. 5 by Bd. Pub. Service for sewage screens for the main sewage pumping station, contract No 8. Julian Griggs, Ch. Engr.

CINCINNATI, O.—Bids are asked until Sept. 26 by Board Public Service for furnishing material and constructing sewers and drains in portions of Clay and North Canal Sts.; bids will also be received Oct. 10 for furnishing material and constructing an intercepting sewer in a portion of Sylvan Ave. Geo. F. Holmes, Clk.

YOUNGSTOWN, O.—Bids are asked until Sept. 30 for construction of a sewer in St. Clair Ave. G. T. Prosser, Clk. Bd. Pub. Service.

AKRON, O.—Bids will be received about Oct. 4 for sewers in Chestnut and Sherman Sts. and Steiner Ave.; also for paving East South St. C. W. Watters is Secy. Bd. Pub. Service.

Contracts for sewers have been awarded as follows: To Barney J. Kane, of Akron, for the Conger Ave. sewer, and to Hunt & Wigley, of Akron, for Oakdale Ave. sewer.

Bids are asked until Sept. 23 for $36,900 of sewer improvement bonds. W. A. Durand is City Audr.

WYANDOTTE, MICH.—City will build a sewer system. After legal difficulties the $100,000 on deposit in bank for the work for over a year has finally become available. Riggs & Sherman combination gravity and pumping system will be installed. Elton R Nellis, Mayor.

DIXON, ILL.—Bids are asked until Sept. 26 for construction of a sewer. I. F. Edwards, Pres. Bd. Local Improvements.

CENTRALIA, ILL.—Bids are asked until Sept. 24 for building about 8,400 ft. of 20-in. pipe sewer and sewage disposal plant. N. M. Rexford is Mayor. Iowa Engineering Co., Clinton, Ia., is Consult. Engr.

CHIPPEWA FALLS, WIS.—Bids are asked until Sept. 26 for construction of a sewer in Pearl St. A. Bigler, Bd. Pub. Wks.

CRESCO, IA.—A sewer system is planned for this place, a portion of which may be built this fall.

KNOXVILLE, IA.—Bids are asked until Oct. 4 for constructing about 10,000 ft. of sewer, also septic tank and filter beds. H. Shivvers, Cy. Clk.

SHENANDOAH, IA.—T. B. Wright was awarded the contract for sewers at $6,594.

MADISON, WIS.—Bids are asked until Sept 23 for constructing sewers in portions of three streets. O. S. Norsman, Cy. Clk.

ALBERT LEA, MINN.—Bids are asked until Sept. 30 for constructing a 645-ft. sewer. Wm. Barneck, Cy. Engr.

ST. PAUL, MINN.—Contract for sewer in St. Anthony Ave. was awarded Christ Johnson at $2,396.

WICHITA, KAN.—E. E. Fitzpatrick was awarded contract for sewers in Dist. No. 1, at $3,862.

TOPEKA, KAN.—Specifications for sewer work will be drawn to admit bidding for cement sewer construction. Fifth Ward sewer specifications call for 3,447 ft. of 45-in. sewer of either brick, vitrified pipe or cement. T. McCabe is Cy. Engr.

OMAHA, NEB.—Bids were received on Sept. 9 for constructing sewers on three streets, as follows. (1) Portland cement, (2) American cement: J. Jensen (1) $21,685, (2) $20,270; J. P. Connolly, (1) $33,540, (2) $27,745; Dunigan Sykes, of Minneapolis, (1) $31,235 (2) $29,496; Kiewit Bros., (1) $32,948, (2) $30 388.

Bids also were received for District sewer 256, which is an annex to the Clifton Hill sewer, and will serve the district, bounded by Dodge and Cuming and 45th and 48th Sts., as follows: (1) Portland cement, (2) American cement; J. Jensen (1) $8,825, (2) $8,694; J. P. Connolly, (1) $9,483, (2) $9,242; John F. Daley, (1) $9,914, (2) $9,821; Dungan Sykes, (2) $10,429. Jensen's two bids omitted to name a price for inlets.

GROTON, S. DAK.—Bids are asked until Sept. 26 for constructing a sewer system in this city. W. A. Burnham, Cy. Audr.

ST. LOUIS, MO.—It is reported that bids will be received on Sept. 24 for contract to construct two miles of an outlet sewer and the necessary septic tanks for the completion of the city sanitary sewer system now under construction.

ST. LOUIS, MO.—Contract for Ninth St. sewer was awarded to the Buehler-Cooney Co., at $8,163. Contract for the Glaise Creek sewer, Dist. No. 4, was awarded to McIntyre & Teese Construction Co., at $34,420.

TAYLOR, TEX.—John Andrewartha, who was granted franchise for a sewer system here is reported in the market for prices on cement, septic tank apparatus, sewer pipe and supplies, flushing apparatus, approved tanks, manhole covers, sewer outfits, etc.

SEATTLE, WASH.—We are informed that bids were received by R. H. Thompson, Cy. Engr., on Sept. 10 for pipe sewers in Bay View Ave. and other streets. Stirrat & Goetz, 410 Washington Block, Seattle, were only bidders. Bid was $16,823.

J. W. Fitts was awarded contract for Fourth Ave. sewer, at $1,745.

SAN PEDRO, CAL.—Bonds have been voted for $30,000 for construction of an outfall sewer system for this city.

SACRAMENTO, CAL.—The following estimates have been made for city work: Cemetery, $4,000; suction pipe, $8,000; water mains, $25,000; I St. Park, $28,000; 28th St. Park, $3,000; garbage crematory, $15,000; fire department, $56,278; street department, $30,000; schools, $16,000; library, $11,500; bond redemption fund, $24,250; sewers, $20,000.

SAN DIEGO, CAL.—Specifications prepared by Geo. A. d'Hemecourt, Cy. Engr., for the sewer pipe called for in the bond issue have been approved by Board of Public Works. City council has passed an ordinance calling for bids. Quantities needed will be about as follows: 40,500 length (2 ft. each), of 6-in. pipe; 6,700 of 8-in.; 3,450 of 10-in.; 7,700 of 12-in.; 1,320 of 14-in.; 1,600 of 16-in.; 260 of 20-in., and, in addition, about 3,500 Y's of different sizes. Cost, $100,000.

BOISE CITY, IDAHO.—Godfrey Sperling, Cy. Engr., writes us that sewer extensions are under contract and that many other improvements are contemplated.

WINNIPEG, MAN.—Council has published notice of intention to make various improvements, that include sewers as follows: A sewer in Cornish Ave., at estimated cost of $41,500; in McGee St., est. cost, $1,485; in Beverley St., est. cost, $7,416; in Boyd Ave., est. cost, $4,085; in Mulvey Ave., est. cost, $1,260. C. J. Brown is Cy. Clk.

## STREETS AND ROADS.

PORTLAND, ME.—C. E. Trumbull & Co., 1121 Tremont Bldg., Boston, Mass., were the lowest bidders for constructing roads, gutters, drains, etc., at Fort McKinley. Bids were opened Sept. 7. Capt. A. W. Yates, Q. M.

WAREHAM, MASS.—Bids are asked by Road Commissioners until Sept. 23 for building of about 4,500 ft stone road. Address N. R. Besse, Secy., Onset, Mass.

SALISBURY, MASS.—The State Highway Commission awarded to Thomas F. O'Neil, of Newburyport, the contract for building new section of state highway here at $3,240.

NEWPORT, R. I.—A resolution is before the Council calling for the grading, curbing and macadamizing of Caleb Earl St., $1,100; Dixon St., $2,800; Middleton Ave., $1,300; Brooks Ave., $3,000; Greenough Pl., $5,300; Chapel Pl., $1,700.

WATERBURY, CONN.—The City Engineer was instructed to advertise for bids for the work of bringing East Main St. from Silver St. east to the Meriden Road to the grade established by the board. Work will be done this fall. Bids will also be received for building a retaining wall near John Henderson's property in the Brooklyn District.

HARTFORD, CONN.—Highway Commissioner Macdonald has awarded contracts as follows: Middletown, 3,000 ft. grading for $2,678, to Macdonald & Hennessey, of Middletown; Orange, 2,550 ft. macadam, $5,905.20, to Frank Arrigoni & Bro., of Durham; Middlebury, 2,700 ft. grading, $3,429, to J. H. Whittemore, of Naugatuck; Danbury, 2,210 ft. macadam and 600 ft. telford, $6,512, to H. J. Mullen, of Woodhaven, N. Y. State and town pay $5,509.49 of this.

NEW YORK, N. Y.—Bids are asked by Board Park Commissioners until Sept. 29 for furnishing and delivering paving brick, hard brick and Portland cement in Brooklyn and Queens Boroughs. John J. Pallas, Pres.

Bids are asked until Sept. 26 by Louis F. Haffen Pres. Boro. Bronx, for regulating, grading, curbing and flagging sidewalks on portions of Creston Ave., W. 183d St., Broadway, requiring about 123,650 sq. ft. new flag; also for completing the following contracts for regulating, grading, curbing and flagging sidewalks on Vyse Ave., requiring about 18,600 sq. ft. flag; for paving with asphalt blocks and sheet asphalt on a concrete foundation E. 187th St., requiring about 65 sq. yds. sheet asphalt and 2,835 sq. yds. asphalt block, and for repaving on Jerome Ave., requiring about 8,800 sq. yds. asphalt block and 11,500 sq. yds. sheet asphalt; also for regulating resetting curb, relaying flag and paving road on Bathgate Ave., requiring about 1,560 sq. yds. asphalt block.

***Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.***

BROOKLYN, N. Y.—Bids are asked immediately for cutting and setting 7,800 ft. stone curb, 43,000 sq. ft. of cement sidewalks and 10,000 yds. of excavation. The average haul is 2,000 ft. Also 2,600 yds. of brick gutter on a concrete foundation, at 93d and 97th Sts., from 4th Ave. to Shore Road All materials supplied. Ficklen & Stobough, 56 Pine St., New York. (Advertised, Engineering News.)

SHARON, PA.—The contract for macadamizing the state road in Hickory township was awarded to Booth & Flynn, Ltd., of Pittsburg, for $35,000. Work will be started immediately.

WILKINSBURG, PA.—Bids are asked by Frease & Sperling, Boro Engrs., until Sept. 26 for grading, curbing and paving a number of streets and alleys of borough.

ASPINWALL, PA.—Borough is ready for bids on grading, paving and curbing Center Ave. E. C. Hurlburt is Borough Engr.

PETERSBURG, PA.—Bids are asked by the Public Improvement and Street Committees until Sept. 29 for laying about 34,000 sq. yds. of sheet asphalt, asphalt blocks, bricks or blocks and other kinds of street roadway pavements. W. N. Jones, Chn. (Advertised, Engineering News.)

CLINTON HEIGHTS, PA.—Bids are asked until Oct. 4 by Borough Council for resetting curb and relaying pavement on Fenn St. J. H. Wise, Clk.

PEALE, PA.—Bids are asked until Sept. 30 by State Highway Dept. at Harrisburg, for constructing 2,141 ft. road, from Kylertown to Peale, and 5,723 ft. of road from Winburne Station to a point on road to Peale, in Cooper township.

WELLSBORO, PA.—Bids are asked until Oct. 10 by State Highway Dept. for building 12,000 ft. of road in Richmond township, 4,700 ft. in Covington township, and 6,051 ft. in Charleston township, all in Tioga County.

McKEES ROCKS, PA.—Bids are asked until Oct. 3 at office of Borough Clerk, 815 Chartiers Ave., for grading, curbing and paving on Mary St. with No. 1 repressed vitrified hillside paving block, and No. 1 repressed vitrified paving block, in all about 2,000 cu. yds. grading 2,100 lin. ft. curb and 2,650 sq. yds. paving. S. L. Gardner, Boro. Engr.

NEW CASTLE, PA.—Bids are asked by State Highway Dept. until Oct. 10 for constructing 2,640 ft. road in Union township, and 3,700 ft. road in Shenango township.

MANSFIELD, LA.—Bids are asked until Oct. 1 for laying and grading sidewalks and curbs with concrete on portions of several streets. J. L. Williams, Mayor.

LOUISVILLE, KY.—Bids are asked until Sept. 26 by Board Public Works for constructing sidewalks on portions of numerous streets.

LAKEWOOD, O.—Bids are asked until Sept. 27 by Village Council for laying stone sidewalks on Detroit St. Wm. H. Evers, Engr., 237 Arcade Bldg., Cleveland; Henry J. Seneel, Village Clk.

AKRON, O.—Bids are asked by Board Public Service until Oct. 4 for sewers in Chestnut and Sherman Sts. and Steiner Ave.; also for paving E. South St. C. W. Watters, Secy.

COLUMBUS, O.—The Board Public Service awarded the contract for paving three streets to Geigele & Garnes for $7,750.

CINCINNATI, O.—Bids are asked by Board Public Service until Sept. 26 for macadamizing roadway on portions of Harvey, Price and Highland Aves. Geo. F. Holmes, Clk.

TOLEDO, O.—Bids are asked by Board Public Service until Sept. 26 for paving on Ann and 15th Sts.

Bids are asked until Oct. 10 for paving on portions of 13th, Clark, Machen and Potter Sts.

BARNESVILLE, O.—Bids are asked until Sept. 26 by Village Council for paving with brick on a portion of South St. E. M. Wilkes, Village Clk.

AKRON, O.—Bids are asked by Board Public Service until Sept. 27 for grading, curbing and paving with brick on South St. Chas. H. Watters, Secy.

CANAL DOVER, O.—An ordinance has been passed by the Council providing for the paving and repaving of certain sidewalks in city limits.

CINCINNATI, O.—Bids are asked by Board Public Service until Oct. 12 for grading and macadamizing on Columbia Ave.

CLEVELAND, O.—Wm. J. Carter, Cy. Engr., has decided that the Detroit St. subway under the Lake Shore railroad shall be paved with Medina block stone.

ROCKVILLE, IND.—The County Commissioners have contracted for a system of gravel roads that will completely cover Adams township. Total cost is $56,350, of which amount Fitzpatrick Bros. of Brazil, Ind., have contracts amounting to $44,382.

EVANSVILLE, IND.—The Anchor Contract Co. has been awarded the yearly contract for sidewalk construction by Board Public Works.

COLUMBUS, IND.—The County Commissioners have ordered an issue of bonds amounting to $44,520, the money to be used in building gravel roads in Bartholomew county.

BROWNSTOWN, IND.—Bids are asked until Oct. 4 by County Commissioners for constructing Seymour and Jonesville gravel road in Hamilton township; for extending Meyer Free gravel road in Redding and Hamilton townships; also Dalton gravel road in Carr township, in all about 4½ miles. Asbury H. Manuel, County Audr.

MOROCCO, IND.—Bids are asked until Sept. 24 for grading, curbing and paving on a portion of State St. J. E. Best, Town Clk.

INDIANAPOLIS, IND.—Bids are asked until Sept. 26 by Board Public Works for grading and paving sidewalks with cement, on portions of Drake and Bradley Sts.; also grading, graveling and rolling roadway on Bradley St. M. A. Downing, Chn.

LOGANSPORT, IND.—The date of opening of bids for paving on North Third St. with asphalt has been extended from Sept. 5 to Sept. 23. Walter A. Osmer, Cy. Engr.

INDIANAPOLIS, IND.—Bids are asked by Board Public Works until Sept. 28 for grading and paving sidewalk with cement on a portion of Pine St., and for grading and paving sidewalk with brick on a portion of Alvord St.

LOGANSPORT, IND.—City Council has ordered that North St. and Eel River Ave. be paved with asphalt.

NEW ALBANY, IND.—Bids are asked until Sept. 30 for grading and paving with vitrified brick on East Sixth St. and with macadam on East Third St. Eugene L. Brisby, Cy. Clk.

DETROIT, MICH.—Barber Asphalt Co. will repave Taylor Ave.

BATTLE CREEK, MICH.—A project is being discussed here of building a boulevard around Lake Goguac, a distance of about five miles.

MENOMINEE, MICH.—The cost of the prospective pavement which will be laid on Ogden Ave. next summer will be, according to the report of the City Engineer, $83,560, of which the city is to pay $37,210 and property owners along the thoroughfare the remainder. The proposed pavement will be of brick with a concrete base and stone curbing. The other streets which will be paved next year with the cost of paving same are as follows: Grand Ave., macadam, with stone curbing, $3,590; State St., $4,079; Wells Ave., $1,275; West St., $3,540; Almyra St., $3,345; curbing on Williams Ave., $1,816.

PEORIA, ILL.—Board Local Improvements awarded to Almon D. Thompson the contract for grading, curbing and paving Oak St. with brick for $4,215.

ALTON, ILL.—The paving of Dry and Bluff Sts. was recommended by Board Local Improvements.

KANSAS, ILL.—Bids are asked until Sept. 28 by Highways Commissioners for constructing a gravel road, in all about 1¾ miles. R. D. Robertson, Chn.

DULUTH, MINN.—The following bids for paving alley from Lake Ave. to Fourth Ave. West were received Sept. 6 by Board Public Works from (a) P. McDonnell and (b) Geo. R. King for various kinds of paving: Sandstone block on sand foundation, (a) $10,171, (b) $9,328; sandstone block on concrete, (a) $12,443, (b) $12,026; vitrified brick on concrete, (a) $10,801, (b) $9,588; tar macadam, (a) $9,120, (b) $7,818.

City Council has voted to pave North First St. with tar macadam.

KANSAS CITY, MO.—The contract for grading Admiral boulevard was let to J. O. West. Cost, $17,000.

St. JOSEPH, MO.—A contract was awarded by Board Public Works for paving with rock asphalt Frederick Ave. to the St. Joseph Street Construction Co. for $1.40 a sq. yd.

ST. LOUIS, MO.—The following are the lowest bids received by Board Public Improvements Sept. 7 for paving: Grand Ave., Parker-Washington Co., asphalt, $14,655; Grand Ave., Parker-Washington Co., asphalt, $21,834; Grand Ave., Parker-Washington Co., asphalt, $12,558; Ohio Ave., Gottlieb Eyerman, brick, $6,256; 23d St., Fruin & Colnon, brick, $4,370; Virginia Ave., Henkel & Sullivan, brick, $16,112; Pestalozzi St , Gottlieb Eyermann, brick, $38,545; 14th St., Kenkel & Sullivan, brick, $15,438; Clinton St., J. E. Perkinson, granite, $18,837.

SEDALIA, MO.—Resolutions declaring it necessary to curb both sides Fifth St. and to pave on Osage Ave. were passed by Council. C. E. Baker, Cy. Clk.

SAN ANTONIO, TEX.—According to work planned by Board of Construction of county roads, Starr St. is shortly to be macadamized. Street Commissioner Stevens will protect this work by macadamizing cross streets for a half block on either side.

SEATTLE, WASH.—Bids are asked by Board Public Works, C. B. Bagley, Secy., until Oct. 1 for laying concrete walks on Irving, Crockett Sts. and others, and grading Boston St. Total estimated cost, $31,020. R. H. Thomson, Cy. Engr.

SEATTLE, WASH.—Contract for laying concrete walks on Boren Ave. et al was awarded to Coast Concrete Co. for $24,880.

Barber Asphalt Co. was awarded the contract for paving several streets. Cost, $41,681.

SEATTLE, WASH.—The following work has been ordered by City Council: Grading, Sturgus road and 16th Ave., est. cost, $5,600; concrete sidewalks, East Lynn St., $2,300; sandstone block paving, Cherry St., $2,900.

OAKLAND, CAL.—The Supervisors have let a contract to W. J. Schmidt to build a road from Livermore to the county line to connect with the mines of the American Magnesite Co., for $43,000.

STOCKTON, CAL.—The Board of Supervisors will improve three blocks of the Copperopolis road in the Fair Oaks, and the County Surveyor was ordered to prepare plans and specifications for the work.

SANTA CRUZ, CAL.—Bids are asked by H. H. Miller, County Clk., until Sept. 26 for construction of Shell Ave.

SACRAMENTO, CAL.—No bids were received by Supervisors for reconstruction of a road leading to Folsom, from Alder Creek.

OAKLAND, CAL.—Resolution was adopted by Supervisors accepting the bid of Ransome Construction Co. to build the scenic boulevard for $300,000.

LOS ANGELES, CAL.—Board Public Works awarded the contract for improving Pico St. to the Fairchild-Gilmore-Wilton Co. for $68,550.

## MANUFACTURING PLANTS.

WORCESTER, MASS.—The Morgan Spring Co. is to erect at once a four-story building as an addition to its plant at Greendale. The contract for construction of building has been awarded to E. J. Cross for about $25,000. Chas. H. Morgan, president of the company, prepared the plans. Brick, three stories, 115 ft. long.

WESTBORO, MASS.—A company has been organized here with $80,000 cap. stock. Jonathan Hunt, City, is president. The company will manufacture metal corners.

JEFFERSON, MASS.—W. Barker, of Worcester, has prepared plans for a four-story brick factory addition, 85 × 45 ft., to the Eagle Lake Woolen Co. The building will be erected by Eli Belisle, 19 Portland St., Worcester.

HOLYOKE, MASS.—The William Skinner Mfg. Co. will erect a new four-story mill. The contract has been let and work will begin at once.

BURRILLVILLE, R. I.—Preparations are being made for the erection of an addition to Oakland Worsted Mill. The building will be 120 × 65 ft., one-story high, with a basement, and is being built to furnish additional room for weaving and finishing department.

AUBURN, N. Y.—Contract for erection of new 2-story, 400 × 80 ft. concrete foundations and mill construction building for Auburn Hanne Co., has been let to Frank B. Gilbreth, general contractor, 176 Federal St., Boston, Mass., and he is in the market for all materials.

BROOKLYN, N. Y.—The Iron Clad Mfg. Co., 2 Cliff St., New York, is desirous of having contractors send in estimates on the construction of two new buildings which the company is to erect at its plant in Brooklyn. There will be a five-story fireproof warehouse, 100 × 125, steel and brick, and a new steel tin house for tinning department, 110 × 125 ft., 25 ft. high. Plans for the buildings will be furnished by Purchasing Department, 186 Cook St., Brooklyn.

NEW YORK, N. Y.—The National Battery Co., 253 Broadway, has increased its capital stock from $500,000 to $1,000,000.

SENECA FALLS, N. Y.—The Goulds Manufacturing Co., S. S. Gould, Pres., has purchased 40 acres of land adjoining its No. 2 works, and this is said to mean that the company intends to enlarge and concentrate its entire works along the line of the Central R. R.

UTICA, N. Y.—The Utica Knitting Co. contemplates the erection of an addition to its plant. It is understood that work may be commenced within a month. The proposed new structure is to be a warehouse. Brick, 100 × 120 ft., three stories.

SYRACUSE, N. Y.—The plant of the Central Iron Works at West Belden Ave. and Sand St., was entirely destroyed by fire. Loss, $30,000. W. H. Brown is a director.

HAMPTON JUNCTION (Sta. Junction), N. J.—The Union Car Truck & Construction Co., Springfield, Mass., has decided to locate its plant in this place. The construction of new plant will begin at once.

GALETON, PA.—Contract for construction of roundhouse and shop equipment for Buffalo & Susquehanna R. R. here, was awarded to McClintic Marshall Construction Co., of Pittsburg. Contract price approximates $300,000.

McKEES ROCKS, PA.—The Taylor Wilson Co., of Pittsburg, will erect large new foundry also a machine shop latter to be built of concrete.

JOHNSTOWN, PA.—The Lorain Steel Co. will erect additional buildings to its plant in the 17th Ward. Cost, $85,000 to $100,000. The new structures will have 165 ft. frontage and will be 250 ft. deep, to be occupied by hammer, bolt, shear and truck shops.

HANCOCK, MD.—The Round Top Cement Co. will rebuild their plant destroyed by fire. The new structure will be 60 × 120 ft. and have a capacity of 500 bbls. Cost, $100,000. Jas. Berrall, Bond Bldg., Washington, D. C., is engineer.

PETERSBURG, VA.—The contract for building the five-story brick factory of the Dixie Peanut Co. in this city has been awarded to Mr. Morse, of Newport News, on a bid of about $25,000. Work will begin at once. About 1,000,000 brick will be required, and each of the five floors will cover a space of 10,000 sq. ft. P. D. Bain, of Wakefield, is President.

RICHMOND, VA.—L. H. Jenkins will soon let a contract for the erection of a two-story addition to his bindery. Cost, $50,000. The addition will be used as a printing department.

PIEDMONT, W. VA.—Brady Construction Co., Fairmont, W. Va., has been awarded contract for erection of 4-story brick warehouse for Piedmont Grocery Co., at Piedmont.

MORGANTOWN, N. C.—The Alpine Cotton Mills Co. will increase its capital from $100,000 to $250,000. The company contemplates enlarging its plant.

WILSON, N. C.—The Ware-Kramer Tobacco Co. has been organized to erect a tobacco factory. D. S. Boykin, President; W. P. Anderson, Vice-President, and Q. D. Ware, Manager.

GREENWOOD, S. C.—It is proposed to organize company, with capital stock of $50,000, at Greenwood, for the purpose of building a mill for manufacture of coarse yarns from mill waste. Rumors intimate that J. K. Durst, President of Greenwood Cotton Mills, is interested.

WHITMIRE, S. C.—It is reported that Wm. Coleman, City will build a cotton factory southwest of Fayettesville on the line of Atlantic Coast Line Railroad. Cost, $1,000,000.

COLUMBIA, S. C.—The Hyatt Brick Co. has been chartered to manufacture brick, tiling, piping and other clay products. Capital, $20,000. The incorporators are: E. H. Hyatt, of Columbia, and I. H. Rogers, of Union.

SPARTANBURG, S. C.—The Drayton mills, near here, are having plans made for improvements.

CORDELE, GA.—The Cordele Ice Co. will erect a new ice factory.

John Macris will establish a candy factory here.

SAVANNAH, GA.—Negotiations for the erection of a $250,000 plant by Armour Fertilizer Co. in Savannah are in progress. D. B. Osborne, Southern manager of the company, with headquarters in Atlanta, has just held a conference with the officials of the Seaboard Air Line along that line. The plant will give employment to from 400 to 500 men. The capacity of the proposed plant would be about 80,000 tons per year.

VALDOSTA, GA.—The Southern Naval Stores & Distilling Co., which was organized some time ago for the purpose of distilling turpentine from wood by steam process, is preparing to erect a large plant here, and it may also erect plants at other places. A charter has been secured and a location bought.

JONES MILLS, ALA.—Mason & Jones will erect a $5,000 saw mill here.

BIRMINGHAM, ALA.—American Drug Co. has increased its capital from $10,000 to $25,000, and will remove plant from Birmingham.

BIRMINGHAM, ALA.—The Eclipse Rolling Mill & Mfg. Co. will erect a new forge shop, 40 × 60 ft., and install four spike machines and two washer machines.

MATHISTON, MISS.—J. A. Pierce & Son, J. H. Stennis and others have organized the Mathiston Brick & Tile Co., with $10,000 capital, to manufacture brick.

NEW ALBANY, MISS.—A factory will be erected here to manufacture chairs, handles and all kinds of turned work. A company has been organized with a capital of $25,000, with J. T. Baker, W. F. Reaves, G. W. Johnson and H. D. Stephens as incorporators.

MAGNOLIA, MISS.—The Magnolia Cotton Mills will increase the capital stock from $100,000 to $200,000, which will be invested to double the plant. The company will build an additional mill of 5,000 spindles and 150 looms, the product to be gray goods. L. L. Hampton is president.

NEW ORLEANS, LA.—It is reported that L. P. Hart, J. L. Onorato and associates have purchased the plant of the New Orleans Ice Co., which will be equipped with a new process for manufacturing ice.

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SHREVEPORT, LA.—The Louisiana-Texas Oil & Pipe Line Co. has been incorporated with $150,000 cap. stock. A. H. Leonard, City, is interested.

DICKSON, TENN.—The Tennessee Iron & [illegible] Co., capital $50,000, is preparing to build a furnace with a daily capacity of 100 tons.

DICKSON, TENN.—G. W. Buquo and associates will erect an ice factory with a capacity of ten tons [illegible]

KNOXVILLE, TENN.—Alex. A. Scott and Al[illegible] Millan will erect a brick plant here at a cost of $[illegible]

WAVERLY, TENN.—J. P. McCarver and W. W. Hobbs will establish a factory here to manufacture hay presses.

NASHVILLE, TENN.—A plant to manufacture columns, balusters, etc., will probably be located here. Address Secretary of Retail Merchants' Association for information.

LOUISVILLE, KY.—The Turney Drier Co. has been incorporated with $50,000 cap. stock. Incorporators are: J. W. Biles, Albert G. Ronald and Walter S. Adams. It is expected that the company will soon erect a plant.

LOUISVILLE, KY.—The Wintersmith Medicine Co. will erect a factory on Hill St. Cost, $7,500.

AKRON, O.—The Akron Kleanit Mfg. Co. has increased its capital stock to $75,000. The company manufactures a polish in South Akron and will enlarge its facilities.

TOLEDO, O.—Stockholders of the Toledo Biscuit Co. have voted to increase the capital stock from $75,000 to $150,000. The added capital will be applied to an enlargement of the industry. New machinery, including ovens, will be installed.

HICKSVILLE, O.—Fire destroyed the handle factory of Kerr Bros. The plant was worth about $25,000 and will be rebuilt.

ANDERSON, IND.—The Indiana Union Traction Co. has filed with the city a bond of $25,000 as a pledge that the company will build its central carshops in this city. Est. cost, $150,000.

EVANSVILLE, IND.—The Metal Bed Works Co. is asking for bids for construction of a new factory. Former bids were rejected because of being too high. Est. cost, $18,000.

INDIANAPOLIS, IND.—The Chandler & Taylor Co. has awarded the contract for construction of its new boiler shops near the Big Four and Vandalia roads in West Indianapolis, to M. F. Jackson, at $35,000.

The American Foundry Co., City, has purchased a four-acre site in West Indianapolis on which to build a new foundry this fall.

TERRE HAUTE, IND.—The Huetterman & Cramer Co., Detroit, Mich., has been awarded the contract to construct the Peoples Brewery in this city. The plant will be four stories high, finished cellar, bottling house and office. Contract price, $135,000.

CHICAGO, ILL.—Vette & Zunker will build a factory on Green St., between Lake and Randolph, after plans by Henry Sierks, 63 Florimond St. The building will be six stories, 74 × 120 ft., and cost $60,000.

CHICAGO, ILL.—Hill & Woltersdorf, Archs., 70 La Salle St., let contracts for a manufacturing building to be built at West Congress and Green Sts., for Richard S. Reynolds, of Utica, N. Y. It is to be occupied by Friedlander, Brady & Co., makers of knit goods, 1241 State St. Four stories, 116 × 125 ft. mill construction, and cost $95,000.

Fire destroyed the plant of the United States Gypsum Co., 103d St. and Calumet River. Loss, $75,000.

JANESVILLE, WIS.—Janesville capital to the amount of $40,000 has been subscribed to erect a cement brick factory. The capacity of the proposed factory will be 18,000 bricks a day.

MILWAUKEE, WIS.—The Wisconsin Bridge & Iron Co., 706 Pabst Bldg., has increased its capital stock from $100,000 to $300,000 and will build an addition to its plant and install new machinery.

MARSHALLTOWN, IA.—Brittain & Co. will expend $50,000 in erecting new buildings. There will be a brick cold storage building, 84 × 165 ft., two-story and basement, with a 75-ton refrigerating machine.

KANSAS CITY, MO.—Witten McDonald will erect a 10,000-spindle cotton mill here. The Secretary of Merchants' and Manufacturers' Association can inform.

WEST, TEX.—The Brazos Valley Cotton Mills, recently organized, with $100,000 capital, will double its plant within 12 months. The present equipment is 4,160 spindles and 210 looms, employing about 175 operatives.

CEMENT, OKLA.—The Farmers' & Merchants' Improvement Co., capital stock $10,000, has been chartered to conduct a grist mill, cotton gin, canning factory, etc. The incorporators are: T. L. Bailey, S. A. Dalcott, S. Funk, W. L. Johnson and G. F. Cutshall.

GUTHRIE, OKLA.—Geo. Frietag and W. H. Shurley, of New Decatur, Ill., will erect a $5,000 foundry here.

LEXINGTON, OKLA.—The Chicago Mfg. Co., of Chicago, will erect an ice factory in this city.

STILLWATER, OKLA.—The Farmers' Shipping & Supply Co. will erect a cotton gin here.

SEATTLE, WASH.—The Queen City Mfg. Co. has purchased a site on the tide lands for a new plant for the manufacture of boxes.

STOCKTON, CAL.—The Stockton Iron Works has decided to rebuild on the site of the plant recently damaged by fire. The structure will be of brick.

PORT FRANCES, ONT.—The Ontario Crown Lands Department has granted the application of the Backus Syndicate, of Minneapolis, Minn., for an extension of time for the completion of the power works at Port Frances, Ontario, until Jan. 1, 1907. The syndicate has practically completed arrangements for erecting on the Canadian side of the river a 3,000-bbl. flour mill.

## MISCELLANEOUS CONTRACTS.

DITCH.—Decatur, Ind.—Bids are asked by Abe Boch, County Audr., until Oct. 1 for constructing Peter J. Bryan Ditch.

TELEPHONE SYSTEM.—Brantford, Ont.—Chicago Telephone Supply Co. has offered to install municipal telephone system here for $37,500.

EXCAVATION.—Crete, Ill.—Bids are asked until Sept. 30 for excavation of about 65,000 cu. yds. of dirt for drainage purposes. Herman Schweppe, Clk. Drainage Comrs.

DIKE, CONCRETE WALL.—Painted Post, N. Y.—Specifications are on file at office of Engineering News, 220 Broadway, New York, for construction of river protection dikes and concrete wall for this village. Bids are asked until Sept. 24, as was advertised in Engineering News.

AMMUNITION HOISTS.—Norfolk, Va.—Bids are asked until Sept. 29 for four chain ammunition hoists for high power guns at Fort Monroe. Capt. E. Eveleth Winslow, U. S. Engrs.

SUBWAY.—Rochester, N. Y.—Bids are to be called shortly, according to reports, for construction of subway at Union St. Est. cost is about $80,000. Edwin A. Fisher is Cy. Engr.

BREAKWATER.—Westbrook, Conn.—Cottages on Quonset Beach have pledged $8,000 toward construction of [illegible] ft. breakwater at Salt Island. Work is to begin early next spring.

MONUMENTS.—Vicksburg, Miss.—Contract for constructing Illinois-Vicksburg Park Memorials is stated to have been let to Culver Construction Co., Springfield, O., for $192,100.

CANAL IMPROVEMENTS.—Columbus, O.—State Board Public Works, W. G. Johnston, Pres., is reported to have $200,000 available for the improvement of northern division of the Ohio canal.

COAL PIER.—Norfolk, Va.—Plans are stated to be under way for construction of large coal pier at Lambert's Point for Norfolk & Western Ry. C. S. Churchill, Roanoke, Va., is Ch. Engr.

RETAINING WALL.—Indianapolis, Ind.—Bids are asked until Sept. 28 for constructing retaining wall on Michigan Road, west of Belt R. R., in Center Township. John E. M'Gaughey, County Comr.

UNDERGROUND WIRES.—Little Rock, Ark.—Ordinance is to come before council to grant Southwestern Telegraph & Telephone Co. right to construct underground system of wires in certain parts of city.

ELECTRIC FEEDER CABLES, ETC.—Gowanda, N. Y.—Contract for electric feeder cables and connections at Gowanda Homeopathic Hospital has been let to Commercial Construction Co., 1 Madison Ave., New York.

CONCRETE-STEEL CISTERN.—Baltimore, Md.—The Dietrick Harvey Machine Co. has awarded contract to Douglas, Gilmore & Co., to build a concrete-steel cistern. The Kahn system of reinforced concrete to be used.

ELECTRIC CAPSTANS.—Boston, Mass.—Following bids were received by Bureau Yards and Docks, Sept. 17 for electric capstans for Boston Navy Yard: American Ship Windless Co., Providence, R. I., $4,589; Hyde Windless Co., Bath, Me., $4,425.

BOILER, PUMP, STACK. — National Military Home, Kan.—Bids are asked by Major W. W. Martin, Treasurer, Western Branch, N. H. D. V. S., National Military Home, until Sept. 26 for furnishing steam boiler, automatic feed pump and smokestack.

RETAINING WALL AND ROOF.—Boston, Mass.—Bids are asked until Oct. 4 for constructing reinforced concrete retaining walls and roof for Ash St. incline of Washington St. tunnel. B. Leighton Beal, Secy., Boston Transit Comn., 15 Beacon St.

BOILER.—Wilmington, N. C.—Plans and specifications for furnishing boiler for U. S. Suction Dredge, "Cape Fear," are on file at office of Engineering News, 220 Broadway, New York. Bids are asked until Oct. 6, as advertised in Engineering News.

OIL PIPE LINE.—Coffeyville, Kan.—Feasibility of constructing oil pipe line from Kansas City to St. Joseph and Omaha is under consideration. It is proposed to lay the line in Missouri River. Preston Y. Savage, C. E., and James E. Garth, Coffeyville, are interested.

DAM.—Logansport, Ind.—City is stated to be calling for bids until 4 p. m., Sept. 23 for building new dam across Eel River at the electric light plant. Cost of work is est. at about $25,000. W. A. Osmer, Cy. Engr., prepared plans and specifications. Fred. Hamomntree is Cy. Clk.

DAM.—Columbus, O.—Bids are asked by Board Public Service, until Sept. 27 for constructing Olentangy River Reservoir Dam. Among other things work will require 580 cu. yds. excavation in foundation, 505 cu. yds. concrete masonry and 90 cu. yds. stone rip-rap. Charles H. Frank, Secy.

DIKE WORK, ETC.—Albany, N. Y.—Bids are asked by Board Public Works, Charles S. Boyd, Supt., until Sept. 29 for removing bars, building slope wall and dike in Town of Deer Park; also for repairing dike, removing bars and clearing channel of Neversink River at Rose's Point in same town.

WHARF, PIERS, GRADING.—Jacksonville, Fla.—Bids are asked until Oct. 12 for the construction of wharfs and piers and for the grading for tracks and yards at the proposed export terminal, consisting of about 250,000 ft. of piling, 2,000,000 ft. B. M. of lumber and 50,000 cu. yds. of earth excavation. E. B. Pleasants, Ch. Engr. (Advertised, Engineering News.)

MECHANICAL STOKERS.—Grand Rapids, Mich.—Bids are asked by the Board of Public Works until Sept. 30 for furnishing all material, labor and utensils required in installing mechanical stokers for four boilers (two Babcock & Wilcox type) and two Brobst water tube types at this city pumping station. John Rowson, Pres.; John C. Brown, Clk. (Advertised, Engineering News.)

UNDERGROUND CABLES.—Washington, D. C.—Following bids were received by Bureau Yards and Docks, Sept. 17, for underground telephone and telegraph cables at League Island Navy Yard; bids given are on Item 1: John A. Roebling Sons Co., Trenton, N. J., $2,243; Western Electric Co., 463 West St., New York, $2,880; Standard Underground Cable Co., Pittsburg, Pa., $2,429.

AMUSEMENT PARK.—New York, N. Y.—A syndicate headed by Andrew J. Cobe, Park Row Bldg., New York, has purchased 35 acres of land between Broadway, 218th St., and the Ship Canal, and will, it is stated, transform it into an amusement park. The new park, which it is said will far exceed anything of the kind in the world, will cost about $2,500,000, exclusive of the cost of the land.

DREDGING.—New London, Conn.—Following bids were received Sept. 17, by Lt.-Col. Chas. F. Powell, U. S. Engrs., for dredging in Milford Harbor, Conn.: John V. Vanfee & Co., 78 Broad St., New York, $15,390; Edward A. Berry, Renneselaer, N. Y., $14,460; Columbia Dredging Co., 64 Broad St., New York, $11,697; International Contracting Co., 17 Battery Pl., New York, $14,700; John P. Anderson, 62 Quay St., Albany, N. Y., $11,580.

STEEL, IRON, ETC.—Chicago, Ill.—Following are lowest bids received Sept. 9 by Major C. S. Riche, U. S. Engrs., for steel, iron, etc., for aqueducts, gates and valves, for Illinois and Mississippi canal: Springfield Bridge & Iron Co., Springfield, Ill., Group 1, total, $44,-636. Modern Steel Structural Co., Group 2, total, $1,587; Group 3, total, $17,916. Lawrence D. Weaning, Cleveland, O., Group 4, total, $12,786. Itemized bids for above proposals are given under Contract Prices.

DUMP CARS, VALVES, HYDRANTS, CEMENT, ETC.—Washington, D. C.—Bids are asked by the Isthmian Canal Commission, Washington, D. C., until Oct. 20 for furnishing 1,000 steel dump and 500 standard American flat cars for construction work as advertised in Engineering News. J. G. Walker, Chn., Evening Star Bldg. Bids are also asked for furnishing 6-20-ton valves and hydrants to be used in connection with the water supply system of the city of Panama. Also for furnishing 2,400 bbls. of Portland cement of American manufacture, with the privilege of calling, at an time before April 1, 1905, for any additional amount up to 10,000 bbls. in 500 bbl. lots as may be required.

CONCRETE DRAIN.—Boston, Mass.—Following bids were received Sept. 17 by Bureau Yards and Docks, for constructing concrete drain at Navy Yard, Boston: Rowe & Perini, Concord St., South Framingham, Mass., $12,300; Hervey A. Hanscom, 53 State St., Boston, Mass., $13,270; Cefalo & Ferguson, 66 Equitable Bldg., Boston, Mass., $13,390; Falvey & Kelly, 105 Sumner St., Somerville, Mass., $10,800; Coleman Bros., Union St., Everett, Mass., $9,700; Ganey & Burke, 7 Alden St., Boston, Mass., $11,-700; Jones & Meehan, 1 Beacon St., Boston, Mass., $8,-970; Metropolitan Contracting Co., 95 Milk St. Boston, Mass., $10,530; Ruggles & Perkins, 17 Milk St., Boston, Mass., $12,571; Smith & Robinson, 17 State St., New York, N. Y., $12,994; Patrick McGovern, 6 Beacon St., Boston, Mass, $12,900.

### MINING

CONVERTER.—Mackay, Idaho.—White Knob Copper Co. may put in converter at a cost of about $80,000.

STAMP MILL.—Idaho.—Owners of Dewey mine will install 22-stamp mill. H. E. Dewey, Tampa, Idaho, is Gen. Mgr.

COAL MINE.—Washington, Pa.—Whitney Coal Co., Washington, will open coal mines near New Cumberland, W. Va.

SMELTER.—Memphis, Tenn.—K. W. Harris, Fredonia, Ky., is reported to be considering establishment of zinc, oxide and lead smelter here.

SMELTER.—Prescott, Ariz.—Local reports state that the Iron King mine, east of Prescott, of which J. K. Burnham, is Pres., is to erect a large smelter.

MILL.—Salt Lake City, Utah.—The Sunrise Mining Co., of Salt Lake City, Utah, may equip its Park Valley mine with a mill in the near future. A. Lochwitz is Mgr.

AERIAL TRAMWAY.—Bingham, Utah.—Jones & Jacobs, of Salt Lake City, have contract to construct a half-mile aerial tram for the United States Mining Co., at Bingham.

MINING MACHINERY.—Globe, Ariz.—It is stated that Cowboy, Gladys, and other claims at Dripping Springs will be equipped soon with machinery. H. Terrill, Troy, Ariz., is in charge.

COAL MINING.—Roseburg, Ore.—The Umpqua Coal Co. has been incorporated to develop and operate the coal mines at Elkton and Kellogg on the Umpqua River. G. N. Dimmick, Roseburg, Ore., is interested.

SAMPLING PLANT.—Tonopah, Nev.—Denver Ore Supply & Testing Co may establish sampling here or at Goldfield. Oliver Dix, Mining Engr., Denver, Colo., was recently in this section investigating output of mines.

SMELTER.—San Francisco, Cal.—It is reported here that the Boston, Mass., syndicate headed by Albert F. Holden, Wm. H. Coolidge, R. D. Evans and E. A. Clark, which bought the Mammoth mining properties in Shasta County, California, is to build an up-to-date smelter costing between $500,000 and $800,000.

## U. S. POSSESSIONS AND CUBA.

IMMIGRATION STATION.—Hawaii.—U. S. Department Commerce and Labor has awarded contract for constructing new immigration station at Honolulu to W. S. Emery for $23,950.

ROAD.—Hawaii.—Surveys have been completed for proposed Palola Valley Road, for which $20,000 has been appropriated. It will be built as part of the regular Honolulu road department's work.

RAILWAY EXTENSIONS.—Porto Rico.—Executive Council, San Juan, has granted authority to Ponce Ry. & Light Co., and American R. R., to construct branches from their main lines running through Ponce around the Playa.

## MEXICO.

### RAILWAYS.

CHIHUAHUA.—Orders have been given for resumption of work on construction of division of Kansas City, Mexico & Orient R. R. between this city and the Rio Grande. The work of locating the remainder of the route for the above road through the most rugged portion of the Sierra Madres, in western Mexico, which was suspended during the rainy season has been resumed. M. P. Paret, Kansas City, Mo., is Ch. Engr.

CITY OF MEXICO.—A new contract has been entered into between the department of communications and the concessionaire of the Hornos & Mazapail R. R., whereby the company agree to construct 15 kilometers of road within next two years and after that, ten kilometers each year, until road reaches Mazapil.

MAZATLAN.—Mexican International R. R. is stated to be making preparations to begin construction of its proposed line to this place. Engineers have recently discovered a pass through the Sierra Mádre Range, which seems to offer less difficulties than any route heretofore proposed.

### STREET AND ELECTRIC RAILWAYS.

CITY OF MEXICO.—The Mexican Ry. Co. proposes, it is stated, to convert its entire system of steam roads, from Mexico City to Vera Cruz, 264 miles, into an electric trolley road. T. Braniff, City of Mexico, is Pres., and George Foot, Res. Engr.

CITY OF MEXICO.—It is understood that in a few months the Mexico City Tramway Co., Ltd., may begin the construction of a new line to Penon. The present mule car line, it is asserted, will not be electrified because the route is too circuitous. It is stated that if the electric line is put in steps will be taken to establish new colony upon the Penon property. Carlos Rivas, Donceles 20, City of Mexico, is stated to be interested in latter project.

### LIGHT AND POWER PLANTS.

LA PIEDAD, MICHOACAN.—Luis Ugarte, a civil engineer of Guadalajara, has applied for a concession to utilize 4,500 liters of water, per second, from the Lerma River at a point near La Piedad. Mr. Ugarte will establish a power plant on the river to generate electricity for the town of La Piedad.

***Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.***

### BUILDINGS.

CITY OF MEXICO.—The plans for the new public school buildings which are to be erected in this city, have been prepared by Architect Enrique Fernandez Castello and they are now being studied by a government commission appointed for that purpose.

CITY OF MEXICO.—A modern office building, to be occupied by some of the offices of the war department of the Mexican Government is to be erected adjacent to the palace building.

CITY OF MEXICO.—Preliminary arrangements will be made soon, according to local reports, for establishment of large department store in this city. It is planned to erect modern 5-story steel frame building, especially arranged for the department store business. J. T. Carnahan, an attorney, of Chicago, Ill., is interested.

JALAPA, VERA CRUZ.—A new theater is to be constructed in this city.

PROGRESSO.—A loss of between $1,000,000 and $1,200,-000 is reported to have been caused by a fire Sept. 8, which wiped out an entire block of business houses in this city.

### WATER-WORKS.

BAVISPE, SONORA.—Antonio V. Loreto and Marcos N. Galaz, of this place, have applied to the Mexican Government for a concession to establish an irrigating system near here. The water supply will be obtained from the Bavispe River.

CITY OF MEXICO.—Engineers are stated to be in the field, securing data for plans for proposed aqueduct which will bring water to the city from Xochicilco Springs. It is estimated that 20,000,000 brick will be required for the construction of the aqueduct and reservoir. It is understood that the Government will not let contracts for the work, but will have it done under supervision by its own engineers. Contracts, however, will probably be let shortly for necessary materials for the work.

MONTEREY.—Isadoro Canales has been granted a concession by the Mexican Government to establish a large irrigation system in this state.

SANTA ROSA MARIA, CHIHUAHUA.—Dr. Luis de la Garza Cardenas, of the city of Chihuahua, has applied for a concession to divert 312 liters of water, per second, from the Santa Ana River, Santa Rosa Maria, district of Iturbide, for the purpose of irrigating lands owned by himself.

### STREETS AND ROADS.

PARRAL, CHIHUAHUA.—It is stated that as soon as the cities of Parral and Guadalupe y Calvo make their pro rata contributions for the building of the proposed wagon road from the Mesa de Sandia, the terminus of the Parral & Durango R. R. to the mining district of Guadalupe y Calvo, the construction work will be commenced The preliminary surveys and estimate of cost of the proposed improvement were made some time ago under the direction of Governor Luis Terrazas, of this state.

### MANUFACTURING PLANTS.

CITY OF MEXICO.—The Compania Harinera y Manufacturera Nacional, S. A., manufacturers of crackers, starch, etc., located on Arcos de Belem, No. 25, city of Mexico, will erect, during the present year, a new building and plant, estimated to cost $500,000. The buildings will cover an area of 24,000 sq. meters, and will be of brick and stone, five stories high. A complete flouring mill with the largest grinding capacity in the republic will be a part of the plant. The machinery for the mill will be imported from the United States.

CITY OF MEXICO.—The Societe Lyonnaise of Chardonnet Silk in North America was recently organized in Paris with $5,000,000 capital for the purpose of building a large artificial silk factory in Mexico. Board of directors comprises the following: M. Dauge, Technical Director of the Societe de Besancon, an independent company from the Societe Lyonnaise, which alone possesses the right to establish factories of Chardonnet silk on the American continent; M. Clavac Duvivier; M. Saillard, Director of the Besancon Co.; M. Faye, Managing Director; M. Girand, London, and M. Bernardin. The plant will probably be located near U. S. border.

GUADALAJARA, JAL.—A steam laundry is to be established in Guadalajara by Angel S. Bustamente, of that city, and Dr. Michael J. Gavin, Kansas City, Mo.

SAN JUAN BAUTISTA.—Professor A. F. Spawn is preparing to establish a banana evaporating plant here. He will later establish a mill for manufacturing banana flour and other banana products.

### MISCELLANEOUS.

COAL MINING.—Agostitlan, Michoacan.—The Compania Explotado de Carbon de Michoacan has been organized by Alfredo Stoeffel, of Mexico City, and associates, for the purpose of developing coal mines at Agostitlan, State of Michoacan, Mexico. Considerable equipment, etc., will be purchased.

CONCENTRATOR.—Magdalena, Sonora. — The erection of a concentrator to treat Wolframite, gold ore, at the Cerro Azul mine, in the Magdalena district, state of Sonora, about 35 miles south of Nogales, is under consideration, and, eventually, a stamp mill will, probably, be installed.

HARBOR IMPROVEMENTS.—City of Mexico.—The commission of engineers Natividad Gonzalez, City of Mexico, Chn., appointed by the Mexican Government to visit Guaymas and to make an estimate of the cost of improving the harbor at that place have formulated their report and submitted same to the government authorities. They estimate that the cost of the proposed harbor works will be about $5,000,000. It is probable that the necessary appropriation will be made by Congress at its coming session and the work of improving the harbor will be inaugurated as soon as the final surveys can be completed and officially approved.

HARBOR IMPROVEMENT.—City of Mexico.—The harbor improvements at the Port of Manzanillo are reported to have been greatly damaged by a tidal wave Sept. 10. A canal which was being constructed at a cost of several hundred thousand dollars, to drain the Cuyutlan Lagoon was destroyed, and dredge employed in the work was wrecked.

LIGHT HOUSE. — Manzanillo, Colima.—The government has sent an engineer to select a site for a large lighthouse to be erected at Manzanillo at the entrance of the port.

MILLING PLANT.—Sonora.—The Transvaal mines, state of Sonora, are installing a 100-ton plant. It is proposed, later, to increase the capacity of the mill to 1,000 tons.

## READERS' WANTS

**This Department contains special requests, and detailed items, from persons in the market for supplies, and from others asking for the names and addresses of firms manufacturing certain tools, machinery and supplies required for work in which they are interested. ENGINEERING NEWS will be glad to furnish at once, free of cost, names and addresses of firms making the machinery or material desired, after which the item will appear in this column, UNLESS OTHERWISE REQUESTED, which request will be honored absolutely. The information in all cases will be sent to our advertisers handling the material wanted, or to other firms should it be out of the line of our advertisers. Every day we are receiving such requests with the understanding that it must not appear in the paper.**

GLASS.—Colorado Springs, Colo.—Harlan LeC. Maison, 1112 Cheyenne Road, writes us that he wishes to get into communication with manufacturers of glass.

MANUFACTURING LETTERING DEVICE.—Savannah, Ga.—J. W. Howard, Asst. Cy. Engr., of Savannah, writes us that he wishes to get into correspondence with a concern that can manufacture for him a lettering device for tracings.

HEAVY HARDWARE.—Kansas City, Mo.—A. T. Canfield, Asst. Engr., K. C., M. & O. Ry., 705 Bryant Bldg., writes us that he wants the names of firms manufacturing or handling heavy hardware, such as is used on mill and railroad shop buildings.

ICE AND REFRIGERATING PLANTS.—Providence, R. I.—E. H. Green, Consult. Chemist, 14 John St., Providence, writes us that he is in the market for small to medium-sized ice and refrigerating plants, and wishes to get into communication with manufacturres of such plants.

VITRIFIED BUFF BRICK, SMOKE-STACK, IRON DOORS AND FRAMES, STRUCTURAL STEEL, BOLTS, IRON STAIRS, ETC.—Fairmont, W. Va.—The Brady Construction Co., Inc., of Fairmont, write us that it is the lowest bidder on the power house at Dam No. 2. Ohio River, and it will need, in connection with this work, the above-mentioned materials.

WOODWORKING AND SAW MILL MACHINERY.—Hoboken, N. J.—S. Hawelik, 207 or 204 Park Ave., Hoboken, writes us that parties in Europe, who are large purchasers of American machinery, wish to secure the names and addresses of manufacturers of woodworking and saw mill machinery.

CONTRACTORS.—Olathe, Kan.—A. L. Hartridge, Ch. Engr. K. C., B. & W. Ry., Olathe, writes us that he wishes to bear from contractors and others who are prepared to contract for piling, bridge timbers, oak ties, 9 × 8 × 8, and for grading. Further items regarding this work and the materials wanted will appear next week.

ASBESTOS SHEETS (4 × 8 ft.), FIRE EXTINGUISHER SPRINKLER SYSTEM AND WATER TANKS (20 000 gals.).—Knoxville, Tenn.—E. M. Henofer, Gen. Mgr. Philadelphia Veneer & Lumber Co., Inc., Box 13, Knoxville, writes us that the company is in the market for the above-mentioned supplies.

ELECTRIC RAILWAY SUPPLIES, DIAMOND AND ROCK DRILLS, SURVEYING AND MINING INSTRUMENTS.—Terre Haute, Ind.—Fred. C. Harper, 505 No. 4th St., Terre Haute, writes us that he wishes catalogues from firms making or handling the above-mentioned supplies, which will include track building material, ballast unloaders, dump cars, etc., required for electric railway work.

### MEXICO (Continued).

MINING DEVELOPMENT.—Morelia.—It is stated that mining engineers will soon arrive from Europe to examine the famous Inguaran copper mines, situated in this state, with the view to devising plans for the extensive development of the property. It is planned to install much new machinery and make other important imrovements. These mines are owned by the Rothschild syndicate of Paris. Carlos Eisemann, lCty of Mexico, may be able to give information.

MINING MACHINERY.—Chihuahua.—F. W. Page, manager of some mining properties in the state of Chihuahua, is in Duluth, Minn., and will go to Chicago to place orders for considerable mining machinery.

MINING MILL.—Coahuayutla Guerrero.—El Gallo Mining Co., City of Mexico, has purchased the famous mine of the same name, situated in the Coahuavutla district, state of Guerrero. The mine is flooded, and after it is unwatered a mill will be constructed on the property. The development work will be in charge of Robert James, of the London Engineering firm of Green & James. The company is an English one. James Geoffrey Fort, and L. P. Goldstone, a mining engineer, both of London, are interested.

MINING MACHINERY.—Etzetlan, Jal.—Considerable improvements, necessitating purchase of machinery and equipment are about to be carried out, at San Pablo group of mines near this place. J. J. Mann, Philadelphia, Pa., is interested.

MINING MACHINERY.—Parral, Chihuahua.—The Compania Minera de Venecia y Roma, of Parral, has struck very rich ore in their workings, and it is probable considerable mining machinery will be purchased soon. Jesus G. Porras, Parral, is 1st Vice-Pres., and Manuel Aguilera, Parral, is Mgr.

QUARRYING.—Juarez.—J. M. White, representing syndicate of Pittsburg, Pa., capitalists, is investigating the onyx and marble quarries, situated south of here with the view of installing machinery and working them on a large scale.

REDUCTION WORKS, ETC.—Guanajuato.—Guanajuato Reduction & Mines Co. contemplates the expenditure of several million dollars gold in the erection of several large reduction works, cyanide plants, etc. Charles L. Kurtz, of Columbus, O., is Pres. The general manager of the company, with headquarters in Guanajuato, is C. W. Van Law.

PUMPING PLANT, ETC.—San Pedro, Durango.—Duncan McVichie, Salt Lake City, Utah, has recently examined the mining properties owned by the Mexican Consolidated Mining & Smelting Co., at San Pedro. He condemns the pumping plant at the Soto mine as of the crudest kind. From the tone of Mr. McVichie's report considerable machinery will, probably, be purchased for use in the development and operation of the mines.

## FOREIGN CONTRACTS—EXPORT NEWS.

STEEL GIRDERS.—Ireland.—Bids are asked by Francis B. Ormsby, Secy. Great Southern & Western Ry., Kingsbridge Terminus, Dublin, until Oct. 5 for 200 tons steel work in girders.

PIER, ETC.—Ireland.—H. Williams, Secy. Bd. Pub. Wks. Dublin, is asking bids until Oct. 5 for constructing 258 ft. long pier at Portnoo, and for excavation for removal of former pier.

BRIDGE RECONSTRUCTION. — England. — London County Council, G. L. Gomme, Clk., County Hall, Spring-gardens, S. W., London, is asking bids until Oct. 4 for reconstruction of the Mitre Bridge over Grand Junction Canal in Hammersmith Borough.

DUMP CARS, VALVES, HYDRANTS, CEMENT.—Panama.—Isthmian Canal Commission, Washington, D. C. is asking bids until Oct. 20 for furnishing 1,000 steel dump cars and 500 standard American flat cars. Bids are also being asked for valves and hydrants, and for furnishing 2,400 bbls. Portland cement. The above work is advertised in Engineering News.

MINING AND CONSTRUCTION WORK.—Dutch East Indies.—Capital is wanted, according to miscellaneous want advertisement in our columns last week, and this, for mining large bodies of gold and copper ore, worked years ago by Aborigines, and also for developing extensive fields containing high-class anthracite coal, located about three days travel from Singapore. The water powers in these localities are very extensive. Our correspondent states that the gold and copper mines are very important, and that extensive native workings exist. The circumstances for mining are as favorable as possible, there being cheap timber, low wages and large water powers. The gold district in question is very large and can support nearly 2,000 heavy stamps, while there is plenty of lead, silver and copper ore in the vicinity to keep smelting works going. Samples of ore will soon be received in San Francisco, and it is likely that samples will be sent to the office of Engineering News, 220 Broadway, New York. The company in which our correspondent is interested hold the chief interest in a gold belt about ten miles long and half to seven miles wide ——Regarding work in Java, D. E. I., another correspondent writes us that only the government at Batavia, Java, advertises for tenders, which are invariably taken up by local firms. As these advertisements appear about two months before required, there is not sufficient time for firms in the U. S. to send in tenders, and again it is doubtful whether such offers would be accepted unless such firm had their representatives in Batavia. Our correspondent believes that the best manner is for firms in the U. S. interested in foreign contracts, to send their men to the D. E. I. every year or so.

## CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

CONCRETE SEWERS.—Washington, D. C.—Following bids were received Sept. 12 for constructing concrete sewers in 4½ and L Sts.; price bid does not include repaving; D. E. McComb, Supt. Sewers; (1) J. Connelly Construction Co., Cleveland, O.; (2) J. H. Louchheim, Philadelphia, Pa.; (3) Sullivan Bros., Philadelphia, Pa.; (4) Lyons Bros., Washington, D. C.:

Bids received at Washington, D. C., Sept. 12, 1904, for Constructing Concrete Sewers in 4½ and L Streets.

| | | (1) | (2) | (3) | (4) |
|---|---|---|---|---|---|
| Earth Excavation | 16,100 cu. yds. | $1.15 | $1.27 | $1.32 | $1.73 |
| Vitrified masonry | 240 " | 18.00 | 19.50 | 21.00 | 21.00 |
| Under drain | 2,100 lin. ft. | .30 | .25 | .25 | .35 |
| Brick work | 145 cu. yds. | 13.50 | 13.00 | 12.00 | 13.25 |
| Concrete B | 1,098 " | 7.90 | 7.20 | 7.40 | 8.50 |
| Concrete C | 825 " | 7.40 | 6.95 | 6.90 | 8.00 |
| Totals | | $40,138 | $41,119 | $42,315 | $51,414 |

LEVEES, PROTECTION WALL.—Memphis, Tenn.—Following bids were received by City Secretary Sept. 1 for placing about 75,000 cu. yds. earth fill in levee in North Memphis; (1) Free haul, (2) additional for every 100 ft. of free haul, (3) average haul above free haul, 2,950 ft., (4) total: P. H. Rogers, (1) 15.95 cts., (2) 1 ct., (3) 29.5 cts., (4) 45.45 cts.; Weatherford & Carey Bros., (1) 24 cts., (2) 1 ct., (3) 29.5 cts., (4) 53.5 cts.; Lewis & Jennings, (1) 27½ cts., (2) 8-10 cts., (3) 23.6 cts., (4) 31.1 cts.; Roach & Manigan, (1) 33 cts., (2) 1 ct., (3) 29.5 cts., (4) 62.5 cts. For constructing protection wall around cotton shed, Weatherford & Carey Bros. offered following bid: Second-class concrete, $9.25 per cu [illegible] clay, $1.25 per cu. yd.; steel, 5 cts. per lb. Same concern offered to build pumping station as follows: Concrete building, $6,910; extra first-class concrete, 9.15 per cu. yd., extra second-class concrete, $7.90 per cu. yd.

LOCK GATES AND ANCHORAGES.—Pittsburg, Pa.—Bids were received Sept. 9 by Major Wm. L. Sibert, U. S. Engrs., for building and erecting in place four pairs of lock gates and anchorages. Bids were made on three propositions, as shown below, but similar bids were made on iron and steel castings, bronze and white oak for all propositions, so only those made under Bid No. 1 are given in following table; (1) American Bridge Co., New York; (2) Pittsburg Steel Construction Co., Pittsburg; (3) Lawrence D. Weaning, Cleveland, O.; (4) Penn Bridge Co., Beaver Falls, Pa.; (5) West Virginia Bridge & Construction Co., Wheeling, W. Va.:

Bids received at Pittsburg, Pa., Sept. 9, 1904, for Building and Erecting Four Pairs of Lock Gates and Anchorages.

| Items. | | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|---|
| Bid No. 1:—All structural parts to be 3 to 4 % nickel steel: | | | | | | |
| Nickel steel | per lb. | $0.07⅛ | $0.0767 | $0.085 | $0.081 | $0.08 |
| Iron and steel castings | " | .07 | .0616 | .076 | .107 | .15 |
| Bronze | " | .30 | .3483 | .33 | .55 | .20 |
| White oak | per M. ft. B.M. | 80.00 | 80.00 | 120.00 | 69.00 | 55.00 |
| Bid No. 2:—All structural parts to be of medium steel: | | | | | | |
| Steel | per lb. | .049 | .0493 | .056 | .056 | .06 |
| Bid No. 3:—All structural parts to be a combination of nickel steel and medium steel: | | | | | | |
| Nickel steel | per lb. | .07⅛ | .0769 | .085 | .081 | .0725 |
| Steel | " | .049 | .0489 | .056 | .056 | .055 |

DREDGING.—New London, Conn.—Following bids were received Sept. 17 by Lt.-Col. Chas. F. Powell, U. S. Engrs., for dredging in Milford Harbor, Conn.; (1) Price per cu. yd. for dredging outer channel to Merwin's Wharf, 35,000 cu. yds.; (2) Price per cu. yd. for dredging from Merwin's wharf to town wharf, 45,000 cu. yds.; (3) Total: John D. Dunfee & Co., 78 Broad St., New York, (1) 18 cts., (2) 21 cts., (3) $15,390; Edward A. Berry, Rensselaer, N. Y., (1) 22 cts., (2) 16 cts., (3) $14,460; Columbia Dredging Co., 64 Broad St., New York, (1) 13 9-10 cts., (2) 15 8-10 cts., (3) $11,697; Internation[illegible] [illegible]ract-ing Co., 17 Battery Pl., New York, (1) 20 cts., [illegible] cts., (3) $14,700; John P. Randerson, 62 Quay St., [illegible]y, N. Y., (1) 16 cts., (2) 14 cts., (3) $11,580.

PAVING.—Seattle, Wash.—Following bids we[illegible] [illegible]eived by Board Public Works Aug. 20 for impro[illegible] Queen Anne Driveway and other streets, contract b[illegible] [illegible]et to James Markey; (1) Barber Asphalt Paving Co.[illegible] [illegible]alley Bldg., Seattle, Wash.; (2) James Markey, Car[illegible] [illegible]mer-cial Steam Boiler Works, Seattle, Wash.:

| Items. | Quantities. | (1) | (2) |
|---|---|---|---|
| Fixed estimate | $1,500.00 | $1,500.00 | [illegible] |
| Clearing and grubbing | Lump sum | 1,500.00 | [illegible] |
| Sub-grading | 3,500 cu. yds. | .50 | .35 |
| Single inlets | 1 | 25.00 | [illegible] |
| Inlets to be moved | 14 | 7.50 | [illegible] |
| Concrete bulkheads | 25 cu. yds. | 12.50 | [illegible] |
| Iron fence | 125 lin. ft. | 1.20 | [illegible] |
| Granite curb, curved | 1,153 " | 1.95 | [illegible] |
| Curbing, concrete | 4,700 " | .48 | .45 |
| Old lumber | 75,000 ft. B.M. | 8.00 | [illegible] |
| New lumber | 12,000 ft. B.M. | 18.00 | [illegible] |
| Catch basins, single inlet | 1 | 65.00 | [illegible] |
| Catch basins without " | 2 | 50.00 | [illegible] |
| Catch basins to be rebuilt | 2 | 25.00 | [illegible] |
| Special tile drain | 800 lin. ft. | .25 | .15 |
| Asphalt pavement | 4,020 sq. yds. | 2.15 | [illegible] |
| Sandstone block pavem't | 6,280 " | 3.20 | [illegible] |
| Wooden stops | 350 lin. ft. | .50 | .50 |
| Brick gutters | 560 sq. yds. | 2.70 | [illegible] |
| Monument cases | 10 | 10.00 | 10.00 |
| Totals | | $41,664 | [illegible] |

*STEEL, IRON, ETC.—Chicago, Ill.—The following are lowest bids received Sept. 9 by Major C. S. Riché, U. S. Engrs., for furnishing steel, iron, etc., for aqueducts, gates and valves for Illinois and Mississippi Canal: Springfield Bridge & Iron Co., Springfield, Ill., Group I.—1,999,300 lbs. structural steel or wrought iron, $[illegible]; cast iron, 96,500 lbs., $.0195; 30,600 lbs. ⅛-in. × 7-in. boat spikes, $.0205; 26,400 lbs. ⅝-in. × 5-in. boat spikes, $.0205; total, $44,636. Modern Steel Structural Co., Waukesha, Wis., Group II.—46,090 lbs. structural steel or wrought iron, $.0316; 875 lbs. cast iron, $.026; 2,120 lbs. cast steel, $.05; total, $1,587; Group III.—290,000 lbs. structural steel or wrought iron, $.0316; 234,500 lbs. cast iron, $.026; 17,400 lbs. ⅜-in. × 7-in. boat spikes, $.0232; 900 lbs. ⅝-in. × 5-in. boat spikes, $.0232; 14,000 lbs. cast steel, $.051; 3,900 lbs. phosphor bronze, $.35; 960 lbs. zinc, $.105; 680 lbs. lead, $.075; total, $17,916. Lawrence D. Weaning, Cleveland, O., Group IV.—55,856 lbs. structural steel or wrought iron, $.042; 263,370 lbs. cast iron, $.0383; 70 lbs. cast steel, $.101; 1,330 lbs. phosphor bronze, $.26; total, $12,786.

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## INDUSTRIAL NOTES.

OUR READERS are requested to send short notes regarding new contracts that they are about to award, or have secured, for our news columns. Changes in firms' names and addresses are also wanted. "Write-ups" will not be inserted under any circumstances, as notes must contain news of interest to our readers. If our readers are in the market for any kind of machinery, tools, etc., we shall be glad to send them names of responsible firms making what they want.

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STUPP BROS. BRIDGE & IRON CO., St. Louis, Mo., announces the removal of its plant to the new location on Weber Road and Missouri Pacific Railway, at Carondelet, where an entirely new plant has been constructed.

THE AMERICAN CEMENT CO., Philadelphia, Pa., has removed to Rooms 601 Pennsylvania B'ldg., 15th and Chestnut Sts. Also the Lesley and Trinkle Co. On account of the growth of the business this removal was found necessary.

H. W. JOHNS-MANVILLE CO., 100 William St., New York, announces that Mr. R. C. Routledge, formerly of Messrs. Thomas F. Smith & Co., New York, which concern has gone out of business, will take charge of its contract department.

SCHUCHARDT & SCHUTTE, Cologne, Germany, announce that since Sept. 1, 1904, all matters appertaining to them and their branches at Brussels, Liege, Paris, Milan, Bilboa, are in charge of the newly installed New York office under the name and address of Alfred H. Schutte, 26 Cortlandt St., New York, of which Mr. T. H. Marburg is the Manager.

THE C. O. BARTLETT & SNOW CO., of Cleveland, O., states that it is now in receipt of the following orders: Levi Cohn & Bros., Lancaster, Pa., one 72-in. Triumph steam dryer, Ohio Retarder Co., Port Clinton, O., one 72-in. Triumph steam dryer; Sheet Bros. Elevator Co., Cleveland, O., complete elevator machinery outfit for this plant, which was recently destroyed by fire; Good Roads Machinery Co., Uniontown, Pa., one elevating outfit.

THE ACME ROAD MACHINERY CO., Frankfort, N. Y., has been awarded the following contracts: Crushing plant for the town of Hermon, N. Y., complete, except power; portable rock-crushing plant with steam power, George E. Kunhardt, Lawrence, Mass.; portable rock-crushing plant and power for road building and concrete work for Daniel O'Connell's Sons, Holyoke, Mass.; road building plant, consisting of rock crusher, engines, drills, scrapers, plows, rails, switches, hoists, etc., Clark County, Ga.; rock crusher and roller, Glade Springs, Va.

G. R. HENDERSON, New York, announces that he has opened an office at 20 West 34th St., for the transaction of general consulting and active work on the lines of mechanical engineering, and offers for references the following names: John H. Davis & Co, 10 Wall St., New York; Cornelius Vanderbilt, 30 Pine St., New York; Mar-vin Hughitt, Pres. Chicago & Northwestern Ry., Chicago; L. E. Johnson, Pres. Norfolk & Western Ry., Philadelphia; J. M. Barr, Pres. Seaboard Air Line Ry., Portsmouth, Va.; J. Levering Jones, Land Title Building, Philadelphia.

THE COFFIN VALVE CO., of Boston, Mass., has recently been awarded a contract by the city of Columbus, O., for the following list of sluice and flap valves: Two 4[illegible]-in. circular sluice valves, two 48-in. circular sluice valves, one 72-in. circular sluice valve, two 30-in. × 48-in. rectangular sluice valves, one 36-in. × 48-in. rectangular sluice valve, two 48-in. × 96-in. rectangular sluice valves, all equipped with the patent ball-bearing stand; [illegible] special flap valves, ranging in diameter from 15 ins. to 5 ft. Its bid was the highest received and the contract was awarded on the merits of the ball-bearing stand.

BELL ENGINEERING & CONSTRUCTION CO., 220 Broadway, New York, wishes to announce that it has purchased the good will and business of B. F. Bell & Co., and that it will continue that business, acting as consulting engineer and contractor, making specialties of the following classes of work: Reinforced concrete structures, ordinary concrete structures, bridges, foundations, abutments, embankments, water front improvements roads, railroads, country estate improvements, dams, buildings, grading and other work of like character. The officers of the company are: Bertrand F. Bell, President; Edward E. Goudey, Treasurer; Edward H. Blanc, Secretary.

THE CONTINENTAL RAILWAY EQUIPMENT CO., 42 Broadway, New York, has purchased the Commercial Railway Equipment Co. It will continue the business heretofore conducted by the Commercial Railway Equipment Co. in connection with its own business. The Continental Railway Equipment Co. controls the Blanchite Process Paint Co., manufacturers of what is known as Blanchite Preservative for car trucks and wheels, bridges and iron and steel work of every description; Blanchite Enamel for wood, iron and steel; Blanchite flat paint for woodwork as well as for iron, steel and roofs. It also controls, together with the Tide Water Oil Co., what is known as Cerion Paint, having a factory for the manufactore of the same at the Tide Water Oil Works, Bergen Point, N. J. The Blanchite Preservative, Blanchite Enamel and Blanchite flat paints, after a twelve months' trial in the New York Subway in competition with other paints and processes for the treatment of iron and steel, was approved and adopted by the Rapid Transit Commissioners of New York and its chief engineer and exclusive contracts awarded. The Rapid Transit Commission of Philadelphia has also approved and adopted the Blancihte Process and paints and has awarded exclusive contracts for 8 miles of the Philadelphia Subway now in course of completion. The Continental Railway Equipment Co. also becomes possessed of $1,850,000 out of a total issue of $2,000,000 of the stock of the Richmond Standard Steel Spike & Iron Co., of Richmond, Va., which has been in operation for five years. It, however, assumes no responsibility or obligations of that company. The stock is merely an asset of this company. The several factories are located at New York City, Bergen Point, N. J., and Richmond, Va. The Continental Railway Equipment Co., having thus become possessed of the above-named properties, together with the exclusive agencies heretofore held by the Commercial Railway Equipment Co., Indiana Road Machine Co., Erie Machine Shops, Cook Mfg. Co., Stroudsburg Engine Works, also Sales Agents for The Garry Iron & Steel Co, Schonthal Iron & Steel Co., Atlas Car & Mfg. Co., Georgia Car Co., and others, will become the operating company under the management of Mr. Geo. H. Hewes, with its main office at 42 Broadway, New York.

WATER-WORKS APPLIANCES.—The following is a list of the exhibits of water-works appliances at the convention of the New England Water-Works Association at Holyoke, Mass., Sept. 14 to 16:

A. P. Smith Mfg. Co., Newark, N. J., tapping machines.
Bard Union Co., Norwich, Conn.
Chapman Valve Mfg. Co., Indian Orchard, Mass., valves and hydrants.
Coffin Valve Co., Neponoset, Boston, valves and hydrants.
Fairbanks Co., Boston.
Greenwood & Daggett Co., Boston.
Hays Mfg. Co., Erie, Pa.
Hersey Mfg. Co., South Boston, Mass., meters.
Holyoke Valve and Hyd. Co.
Kennedy Valve Co., New York, valves and hydrants.
Lead-Lined Iron Pipe Co., Wakefield, Mass., pipe.
H. Mueller Mfg. Co., Decatur, Ill., water-works supplies.
National Meter Co, New York, meters.
Neptune Meter Co., Long Island City, N. Y., meters.
Norwood Engineering Co., Florence, Mass., hydrants.
Pittsburg Meter Co., East Pittsburg, Pa., meters.
Thomson Meter Co., Brooklyn, N. Y., meters.
Union Water Meter Co., Worcester, Mass., meters.
R. D. Wood & Co., Philadelphia, cast iron pipe.
H. R. Worthington & Co., New York, pumping engine supplies.

THE INGERSOLL-SERGEANT DRILL CO., 26 Cortlandt St., New York, has attracted attention by the installation of a central compressed air power transmission plant at the North Amherst (O.) quarry of the Cleveland Stone Co. A saving, amounting to approximately $50,000 a year, was reported. Since that time the air lines have been extended to two smaller quarries in the neighborhood, where the air is now used to operate a 125-HP. Brown Corliss engine driving a six-gang saw mill, two large pumps and several smaller ones, five chaneling machines, five rock drills, four hoisting stations and several blacksmith fires. The engineers in charge record the following savings as a result of the additional installation: Coal formerly burned, 20 tons, run of mine, at $2.50, $50; two engineers day and night in mill, mill boss now looking after air engine, $4.80; man for wheeling coal, $1.35; three firemen taken off hoist boilers, $3.75; repair men taking care of boilers, etc., $2.50; two channeling machines shut down because of increased capacity with air, two runners at $2, four helpers at $1.50, $10; two drill men taken off for same reason, $3; repairs on the two channelers and drills shut down, $1; total daily reduction in cost following the change to air, $76.40. While there is a small additional cost for coke used for reheating, it is offset by the saving made in repairs, oil and other supplies through the reduction in the number of drills and channelers used. Against this plant must be charged its proportion of the cost of the power. A record made for thirty days shows the daily charge for power, including interest, depreciation, fuel, etc., as $16.40, making a net gain per day at these two quarries of $60. Counting 300 days to the working year, the saving would amount to $18,000, a dividend of almost 50% on the original investment.

## CONTRACT PRICES.

*RESERVOIRS, LAYING MAINS, ETC.—Cincinnati, O.—Following bids were received Sept. 9 by Trustees Water-Works for completing construction of settling reservoirs and the laying of pump mains and miscellaneous work in connection therewith; (1) Keeling & Ridge, Pittsburg, Pa.; (2) Western Construction Co.; (3) F. H. Kirchner, Cincinnati, O.:

Bids Received at Cincinnati, O., Sept. 9, 1904, for Completing Construction of Settling Reservoirs and Laying Pump Mains, and Miscellaneous Work in Connection Therewith.

| Items. | Quantities. | (1) | (2) | (3) |
|---|---|---|---|---|
| All clearing and grubbing, including removal of all weeds on reservoir areas | | $500.00 | $4,000.00 | $2,000.00 |
| Embankment for reservoirs and for filling side depressions, including plowing and benching sites, excavating, hauling, spreading and trimming | 415,000 cu. yds. | .50 | 1.00 | .80 |
| Slope, in place, to be trimmed to a finished surface | 13,700 sq. yds. | .50 | .30 | .10 |
| Embankment for roadway connecting with Columbia and New Richmond Pike, including excavating, hauling, spreading and trimming | 400 cu. yds. | .50 | 1.00 | .35 |
| Rolling embankments | 159,000 t. m. | .20 | .30 | .12 |
| Excavations for foundations | 5,200 cu. yds. | .70 | 1.50 | .50 |
| Excavation to straighten creek channel and other waste excavation, measured in waste banks | 34,000 cu. yds. | .50 | .95 | .80 |
| Sodding of slopes, including soiling, hauling, pinning and sprinkling | 3,000 squares | 5.00 | 3.00 | 4.00 |
| Sowing in grass, including plowing, fertilizing, harrowing and seeding | 33 acres | 100.00 | 30.00 | 30.00 |
| Broken rock under revetments | 36,900 cu. yds. | 1.75 | 2.20 | 1.50 |
| Sand to fill voids in broken rock revetment in place | 100 cu. yds. | 1.50 | 1.50 | 1.00 |
| Dressing and trimming surface of rock revetment in place. | 6,900 sq. yds. | .20 | .40 | .15 |
| Inner curb | 1,200 cu. yds. | 12.00 | 15.00 | 12.00 |
| Portland cement concrete revetment of 1-in. stone, including parting joints and filling same with asphalt, also including wedge at junction of lower and upper revetments | 40,200 cu. yds. | 6.00 | 9.00 | 7.75 |
| Removing yarn from parting joints in place, and cleaning and filling same with asphalt, including some repairs on concrete surface in place | 1,856 sq. yds. | .50 | .20 | .10 |
| Asphalt, burlap and brick revetment | 240,740 sq. yds. | .... | .... | .... |
| Natural cement concrete in floor of valve pit and valve chambers, plastered with Portland cement | 33 cu. yds. | 8.00 | 8.00 | 6.00 |
| Cleaning and plastering floors of valve chambers No. 1 and No. 2 | 47 sq. yds. | 1.00 | 1.00 | 1.00 |
| Natural cement concrete in foundation of weir, valve pit, overflow cascades, piers, pipe protection, open sewer, inlets, steps, pipe bracing, shafts, arching and other structures | 850 cu. yds. | 5.00 | 8.00 | 6.00 |
| Sandstone masonry in weir and overflow | 804 cu. yds. | 12.00 | 15.00 | 14.00 |
| Granite masonry in weir | 18 cu. yds. | 50.00 | 70.00 | 75.00 |
| Sandstone masonry in valve pit | 230 cu. yds. | 12.00 | 18.00 | 15.00 |
| Sandstone masonry in cascades | 1,126 cu. yds. | 12.00 | 15.00 | 14.00 |
| Sandstone masonry in piers for floating tubes, sheaves and crabs | 370 cu. yds. | 12.00 | 15.00 | 14.00 |
| Joints to be scraped and pointed on sandstone masonry in place in piers for floating tubes | | 100.00 | 500.00 | 50.00 |
| Sandstone masonry in steps and curbing for mud valves | 73 cu. yds. | 12.00 | 15.00 | 15.00 |
| Copings for shafts and valve chambers | 17 cu. yds. | 20.00 | 18.00 | 16.00 |
| Sandstone masonry in headwalls | 5 cu. yds. | 12.00 | 15.00 | 12.00 |
| Brick masonry in shafts | 90 cu. yds. | 20.00 | 20.00 | 16.00 |
| Removing centers in Archway No. 2, cleaning out mud and mortar from both archways, cleaning and pointing Archway No. 2, filling annular spaces around 8 and 30-in. pipes, setting brick around 8-in. valves in both archways, cleaning and painting I-beams, and furnishing and laying footwalk in each archway | | 250.00 | 3,000.00 | 350.00 |
| Brick roadway pavement over overflow | 85 sq. yds. | 2.50 | 3.00 | 1.50 |
| Brick masonry in valve chambers, valve curbs, overflow, manholes, inlets and sewers | 141 cu. yds. | 20.00 | 20.00 | 16.00 |
| Cleaning and pointing seven brick sewer junctions | | 150.00 | 400.00 | 50.00 |
| Outside curbs on dams | 82 cu. yds. | 12.00 | 15.00 | 13.00 |
| Dry Paving in gutters and drains | 2,050 cu. yds. | 6.00 | 7.00 | 6.00 |
| 12-in. sewer pipe | 300 lin. ft. | 1.00 | .70 | 1.25 |
| Relaying 12-in. sewer pipe on east side of Reservoir No. 2. | 395 lin. ft. | .40 | .30 | 1.00 |
| Cleaning and pointing upper half of inside of 24-in. branch inlet laid | 17 lin. ft. | 1.00 | .60 | .50 |
| Cleaning and pointing upper half of inside of 24-in. sewer pipe laid | 24 lin. ft. | 1.00 | .80 | .70 |
| Backfilling 24-in. sewer pipe laid | 30 cu. yds. | .50 | .60 | .30 |
| 27-in. sewer pipe | 76 lin. ft. | 3.50 | 2.25 | 4.00 |
| Cleaning and pointing upper half of inside of 27-in. sewer pipe laid | 488 lin. ft. | 1.50 | .50 | .50 |
| Backfilling 27-in. sewer pipe laid | 80 cu. yds. | .50 | .60 | .30 |
| 30-in. sewer pipe | 58 lin. ft. | 4.50 | 3.55 | .50 |
| Cleaning and pointing upper half of inside of 30-in. sewer pipe laid | 127 lin. ft. | 1.50 | .50 | .50 |
| Backfilling 30-in. sewer pipe laid | 40 cu. yds. | .50 | .60 | .30 |
| Cleaning and pointing upper half of inside of 33-in. sewer pipe laid | 68 lin. ft. | 2.00 | 1.00 | .30 |
| Backfilling 33-in. sewer pipe laid | 50 cu. yds. | .50 | .60 | .30 |
| Cleaning and pointing upper half of inside of 36-in. sewer pipe laid | 258 lin. ft. | 2.00 | 1.00 | .50 |
| Macadam in roadways, including trimming for foundation and shouldering | 8,180 cu. yds. | 1.75 | 2.50 | 1.50 |
| Rolling macadam | 2,740 t. m. | .20 | .40 | .12 |
| Iron in clamps and dowels, iron ladders, anchor rods, I-beams, cross bars for valve rods and iron gratings for side inlets | 31,400 lbs. | .05 | .06 | .10 |
| Laying 4-in. cast-iron pipe | 200 lin. ft | .35 | .50 | .40 |
| Laying 6-in. cast-iron pipe | 400 lin. ft | .40 | .60 | .50 |
| Laying 8-in. cast-iron pipe | 10,200 lin. ft | .45 | .90 | .60 |
| Testing 8-in. cast-iron pipe laid | 920 lin. ft | .50 | .20 | .10 |
| Laying 12-in. cast-iron pipe | 5 lin. ft | .75 | 2.00 | 1.50 |
| Laying 30-in. cast-iron pipe | 22 lin. ft | 5.00 | 4.00 | 4.00 |
| Caulking 25 joints, leading and caulking 4 joints and repairing special No. 6 in 30-in. pipe laid in archways | | 100.00 | 200.00 | 100.00 |
| Cleaning and testing 48-in. pipe laid | 375 lin. ft | .50 | 1.00 | 1.00 |
| Laying 60-in. cast-iron pipe | 4,900 lin. ft. | 5.00 | 8.50 | 7.50 |
| Caulking 54 joints in 60-in. pipe line, and caulking lead under same in Archway No. 2, and cleaning and testing 1,376 ft. of 60-in. pipe in both archways, leading and caulking two 8-in. joints, and furnishing and placing a beveled 8-in. flange joint | | 1,538.00 | 3,000.00 | 600.00 |
| Cleaning and testing 60-in. pipe laid | 327 lin. ft | 1.00 | 1.00 | .90 |
| Laying 72-in. cast-iron pipe | 380 lin. ft | 6.50 | 20.00 | 14.00 |
| Laying 6-in. valves | 7 | 5.00 | 5.00 | 3.00 |
| Laying 8-in. valves | 5 | 5.00 | 6.00 | 3.00 |
| Laying 60in. valves | 11 | 100.00 | 100.00 | 125.00 |
| Setting extension rods on 8 and 60-in. valves as per plans. | | 80.00 | 6.00 | 100.00 |
| Laying 72-in. sluice gates | 2 | 100.00 | 200.00 | 100.00 |
| Laying 30-in. mud valves | 2 | 50.00 | 100.00 | 50.00 |
| Laying 4-in. air valves | 9 | 10.00 | 6.00 | 20.00 |
| Laying manholes to 60-in. mains | 5 | 25.00 | 30.00 | 50.00 |
| Setting flushing hydrants, including 4-in. valves | 23 | 10.00 | 15.00 | 10.00 |
| Setting cast-iron necks and gratings for standard vertical inlets | 7 | 5.00 | 2.00 | 10.00 |
| Setting cast-iron frame for weir notch | 1 | 10.00 | 200.00 | 100.00 |
| Total | | $719,821 | $1,148,089 | $911,465 |

BRICK SEWER.—Springfield, Ill.—Pleasure Driveway and Park District, Arthur Hay, Secy. Engr., has let contract for constructing 4,000 ft. of 5-ft. brick sewer to Bretz & Irwin, Springfield, Ill., for $18,074. The trench is to average 8 ft. in depth and will be excavated in clay and slate rock. Their itemized bid was as follows: Brick sewer, $4.35 per ft.; 10 manholes, $22 each; 4 ft. 24-in. vitrified pipe, $1.50; 150 ft. 18-in. vitrified pipe, $0.90; 500 ft. 12-ft. vitrified pipe, $0.48; 100 ft. 6-in. vitrified pipe, $0.25; 8 cu. yds. concrete, $5.

HYDRANTS, METERS.—Winnipeg, Man.—City Fire Water & Light Committee recently awarded contracts for hydrants and meters as follows: 6-in. hydrants, 80, Ruselau Mfg. Co., $37.05 each; 8-in. hydrants, 20, Fairbanks Co., $48.62 each, f. o. b. Winnipeg; ⅝-in. Worthington disk meters, Model A, straight reading dials, 100, J. McDougall, Caledonian Iron Works, $8.46 each; ½-in. Trident meters, 100, Neptune Meter Co., $11.25 each, f. o. b. Winnipeg; ½-in. Empire meters, National Meter Co., $12.50 each, f. o. b. Winnipeg.

## WATER-WORKS.

Bordentown, N. J., Sept. 16, 1904.

Sealed proposals will be received by the Board of Water Commissioners of Bordentown, New Jersey, at the Council Room in the City Hall, on the fourth day of October, 1904, at two o'clock P. M., for constructing a system of Water-Works.

The work to be done consists of constructing Collecting Drains, a Pump House and Suction Well; furnishing and erecting Pumps and Boilers; erecting a Reinforced Concrete Tower with a Steel Tank of 200,000 gallons capacity; and furnishing and laying the following amounts of Cast-Iron Pipe:

17,500 feet of 10-inch pipe.
3,410 feet of 6-inch pipe.
20,865 feet of 6-inch pipe.
7,410 feet of 4-inch pipe.

Bidders will be required to bid on the complete plant.

Proposals shall be endorsed "Proposals for Constructing Water-Works," also with the name of the person making the proposal, and the date of presentation.

Specifications and plans may be seen at the store of Joseph F. Coughlin, corner of Second and Thompson Streets, Bordentown, N. J.; also at the office of C. C. Vermeule, Engineer in Charge, 203 Broadway, New York.

The Board of Water Commissioners reserves the right to reject any or all proposals.

All proposals must be enclosed in sealed envelopes, and addressed and delivered to the President of the Board of Water Commissioners, not later than the date and time above named.

BOARD OF WATER COMMISSIONERS,
12-2t DAVID R. BROWN, President.

## PIPE, VALVES, CASTINGS, SEWERS, ETC.

Kiel, Wis.

Bids are asked until 8 p. m., Sept. 27, 1904, for 12,000 ft. of 4, 6 and 8-in. water mains, hydrants, valves and specials, and 4,000 ft. 10-in. sewers, manholes, etc.

W. G. KIRCHOFFER, Engr.,
Madison, Wis.

Plans and specifications are on file at Chicago office of Engineering News, in the Monadnock Bldg., and in the N. Y. office, 220 Broadway. 12-1t

## GRADING, CURBING AND SIDEWALKS.

Brooklyn, N. Y.

Bids are wanted immediately for cutting and setting 7,800 ft. of stone curb, 43,000 sq. ft. of cement sidewalks and 10,000 yds. of excavation. The average haul is 2,000 ft. Also 2,600 yds. of brick gutter on a concrete foundation. All materials are supplied. Will let by whole or part. A small surety bond will be required, or other suitable security. The work is to be done at 93d and 97th Sts., Brooklyn, N. Y., from Fourth Ave. to Shore Road.

FICKLEN & STOBOUGH,
12-1t. 56 Pine St., New York.

## NOTICE TO PAVING CONTRACTORS.

Petersburg, Va.

Proposals will be received by the Public Improvement and Street Committees of Petersburg, Virginia, until 12 o'clock m. on the 29th day of September, 1904, for laying about 34,000 square yards of sheet-asphalt, asphalt blocks, vitrified bricks or blocks and other kinds of street roadway pavements.

Plans and specifications and forms of contracts and proposals are on file at the office of the City Engineer, where they can be seen on application.

The Committee reserves the right to reject any or all bids.

W. N. JONES,
Acting Chairman Public Improvement Committee. 12-1t

ISTHMIAN CANAL COMMISSION.—PROPOSALS FOR STEEL DUMP CARS AND STANDARD AMERICAN FLAT CARS FOR ISTHMIAN CANAL COMMISSION.—Washington, D. C., September 19, 1904.—Sealed proposals for furnishing one thousand steel dump cars and five hundred standard American flat cars for construction work on the Isthmus of Panama, will be received at the office of the Isthmian Canal Commission, Washington, D. C., until 12 o'clock noon of the 20th day of October, 1904, when they will be publicly opened. Proposals should be made separately for the dump cars and for the flat cars, and should be addressed to the Chairman of the Isthmian Canal Commission, Evening Star Building, Washington, D. C., and should be endorsed "Proposal to furnish one thousand steel dump cars for construction work on the Isthmus of Panama," and "Proposal to furnish five hundred flat cars for construction work on the Isthmus of Panama." General specifications for those cars may be obtained on application to the Secretary of the Commission, Washington, D. C. The Commission reserves the right to reject any and all bids, and to accept the bid most advantageous to the Commission. J. G. WALKER, Chairman Commission. 12-4t

## MECHANICAL STOKERS, ETC.

Office Board of Public Works,
Grand Rapids, Mich., Sept. 16, 1904.

Sealed proposals will be received at the office of the Board until Sept. 30, 1904, at 1.30 p. m., for furnishing all material, labor and utensils required in installing mechanical stokers for four boilers (two Babcock & Wilson type and two Brobst water tube type) at the City Pumping Station in this City, according to the plans and specifications on file at the office of the General Superintendent.

The Board reserves the right to reject any or all bids.

Each bidder shall deposit with his proposal a certified check or certificate of deposit, payable to the order of John Rowson, President, in the sum of 5 per cent. of his proposal, but not less than $50.00, to be forfeited to the City of Grand Rapids in case he shall fail to enter into contract, in accordance with his proposal, should his proposal be accepted by the Board of Public Works.

All proposals must be made upon blanks that will be furnished upon application at the office of the Board. By order of the Board.

JOHN ROWSON, President.
Attest:
JNO. C. BROWN, Clerk. 12-2t

DEPARTMENT OF THE INTERIOR. Washington, D. C., August 30, 1904.—Sealed proposals, in duplicate, will be received by the Engineer U. S. Geological Survey, Lawton, Okla., up to 2 o'clock p. m., October 10, 1904, for the erection of nine public buildings in Oklahoma Territory, as follows: One court house and one jail building in each of the cities of Lawton, Comanche County; Anadarko, Caddo County, and Hobart, Kiowa County; one 8-room and one 4-room school building in the city of Lawton, and one 8-room school building in the city of Hobart; and also for moving into each of said jail buildings and properly installing in the same steel jail cells now located in temporary structures on the respective court house lots. Bids should be addressed to the Engineer, U. S. Geological Survey, Lawton, Okla., and will be publicly opened at 2 o'clock p. m., October 10, 1904, at the office of the U. S. Geological Survey, Lawton, Oklahoma. Specifications and forms of proposal may be obtained on application to the Engineer, U. S. Geological Survey, Lawton, Okla., or to Mauran, Russell & Garden, Chemical Building, St. Louis, Mo.; the latter will also furnish complete sets of plans upon receipt of draft or money order for $6.15. Each bid must be accompanied by a certified check, payable to the order of the Secretary of the Interior, for 2 per cent. of the aggregate amount thereof, as a guarantee that the bidder will, if successful, promptly execute a satisfactory contract and bond in the sum of 50 per cent. of the contract price for the faithful performance of the work. The cost of construction of the buildings and moving of prison cells is to be paid out of the funds derived from the sale of town lots in Lawton, Anadarko and Hobart, respectively, held in August, 1901, as provided by the acts of March 3, 1901, and June 30, 1902. The right is reserved to reject any and all bids, waive technical defects, and accept any part of any bid and reject any other part, if the interests of the Government require it. THOS. RYAN, Acting Secretary. 9-6t

ISTHMIAN CANAL COMMISSION.—PROPOSALS FOR VITRIFIED SEWER PIPE AND CEMENT SEWER PIPE FOR SEWER SYSTEM OF PANAMA.—Washington, D. C., September 19, 1904.—Sealed proposals for furnishing vitrified sewer pipe and cement sewer pipe 4 to 24 inches in diameter for the sewerage system of Panama, will be received at the office of the Isthmian Canal Commission, Washington, D. C., until 12 o'clock noon, of the 20th day of October, 1904, when they will be publicly opened. Proposals should be addressed to the Chairman of the Isthmian Canal Commission, Evening Star Building, Washington, D. C., and should be endorsed "Proposal to furnish vitrified sewer pipe," or "Proposal to furnish cement sewer pipe," as the case may be. General specifications for this pipe may be obtained on application to the Secretary of the Commission, Washington, D. C. On the basis of the proposals made, the Commission will determine which of the two kinds of pipe will be used. The Commission reserves the right to reject any and all bids, and to accept the bid most advantageous to the Commission. J. G. WALKER, Chairman of Commission. 12-5t

FORT MEADE, S. D., September 15, 1904.—Sealed proposals in triplicate will be received until 2 p. m., September 30, 1904, for constructing at Fort Meade, S. D., a five hundred thousand gallon reinforced concrete reservoir. Bidders must state time in which they will complete work. Information furnished upon application. Plans and specifications can be seen with Quartermasters, New York, Saint Paul, Denver, Cheyenne, Omaha. A guarantee in amount of 10% must accompany proposals. Envelopes containing proposals should be marked "Proposals for Reservoir, Fort Meade, S. D.," addressed GEORGE L. BYRAM, Constructing Quartermaster. 11-2t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 19, 1904.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 25th day of October, 1904, and then opened, for the construction (including plumbing, heating and ventilating, gas piping and electric wiring and conduits) of the U. S. Post Office and Court House at Huntington, West Virginia, in accordance with drawings and specification, copies of which may be had at this office, or at the office of the Postmaster at Huntington, West Virginia, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 12-2t

## PUMPING ENGINES.

Department of Public Works,
Chicago, September 16, 1904.

Sealed proposals will be received by the city of Chicago until 11 a. m., Thursday, November 17, 1904, at room 222 city hall, for designing, furnishing and erecting in each of the stations known as the Central Park Ave. and Springfield Ave. pumping stations, one (1) vertical triple expansion pumping engine, each having a capacity of forty (40) million U. S. gallons of water per twenty-four (24) hours, with all necessary appurtenances, complete, according to plans and specifications on file in the office of the Department of Public Works of said city, room 325 city hall.

Proposals must be made out upon blanks furnished at said office, and be addressed to said department, indorsed "Proposals for Two Forty (40) Million Gallon Pumping Engines," and be accompanied with ten thousand (10,000) dollars in money or a certified check for the same amount on some responsible bank located and doing business in the city of Chicago and made payable to the order of the commissioner of public works.

The commissioner of public works reserves the right to reject any or all bids.

No proposal will be considered unless the party offering it shall furnish evidence satisfactory to the commissioner of public works of his ability, and that he has the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications, provided such contract should be awarded to him.

Companies or firms bidding will give the individual names as well as the name of the firm with their address.

F. W. BLOCKI,
12-8t Commissioner of Public Works.

ISTHMIAN CANAL COMMISSION.—PROPOSALS FOR PORTLAND CEMENT.—Washington, D. C., September 19, 1904.—Sealed proposals for furnishing 2,400 barrels Portland cement of American manufacture, with the privilege of calling, at any time before April 1, 1905, for any additional amount up to 10,000 barrels in 500 barrel lots as may be required, will be received at the office of the Isthmian Canal Commission, Washington, D. C., until 12 o'clock noon of the 20th day of October, 1904, when they will be publicly opened. Proposals should be addressed to the Chairman of the Isthmian Canal Commission, Evening Star Building, Washington, D. C., and should be endorsed "Proposal to furnish Portland Cement." General specifications for this cement may be obtained on application to the Secretary of the Commission, Washington, D. C. The Commission reserves the right to reject any and all bids, and to accept the bid most advantageous to the Commission. J. G. WALKER, Chairman of Commission. 12-4t

ISTHMIAN CANAL COMMISSION.—PROPOSALS FOR VALVES AND HYDRANTS FOR USE IN PANAMA.—Washington, D. C., September 19, 1904.—Sealed proposals for furnishing six-inch to twenty-inch valves and hydrants to be used in connection with the water supply system of the City of Panama will be received at the office of the Isthmian Canal Commission, Washington, D. C., until 12 o'clock noon of the 20th day of October, 1904, when they will be publicly opened. Proposals should be addressed to the Chairman of the Isthmian Canal Commission, Evening Star Building, Washington, D. C., and should be endorsed "Proposals to furnish valves and hydrants for the water supply system of the City of Panama." General specifications for these valves and hydrants may be obtained on application to the Secretary of the Commission, Washington, D. C. The Commission reserves the right to reject any and all bids, and to accept the bid most advantageous to the Commission. J. G. WALKER, Chairman of Commission. 12-4t

DEPARTMENT OF AGRICULTURE, Office of the Building Committee, Washington, D. C., Sept. 19, 1904.—Sealed proposals will be received at this office until 2 o'clock p. m. on the tenth day of November, 1904, and then opened, for the general construction (except heating apparatus, elevators, electric wiring and conduit systems) of two laboratory buildings for the U. S. Department of Agriculture, Washington, D. C., in strict accordance with the drawings and specifications by Rankin, Kellogg & Crane, Architects, 1012 Walnut Street, Philadelphia, Pa., copies of which may be had upon application to the Supervising Engineer, Capt. John Stephen Sewell, Corps of Engineers, U. S. Army, at the Department of Agriculture, Washington, D. C. One set only of drawings and specifications will be sent to any one bidder, but additional sets may be purchased of the printers designated by the Department, at cost of production of same. All applications must be accompanied by a certified check for $250.00 made payable to the Disbursing Clerk of the Department of Agriculture, which checks will be retained until the return of all drawings and specifications, including those which may have been purchased from printers. B. T. GALLOWAY, Chairman. 12-7t

PROPOSALS FOR BUILDING.—Office of the Constructing Quartermaster, Fort Totten, Willets Point, N. Y., September 16, 1904.—Sealed proposals for the construction, plumbing and electric wiring of one set of hospital sergeant's quarters will be received here until 12 m., October 16, 1904, and then opened. Bids must be accompanied by proper guaranty and state the time in which work will be completed. Information furnished on application. Envelopes containing proposals should be indorsed "Proposals for Hospital Sergeant's Quarters" and addressed to CAPTAIN GEORGE H. McMANUS, Constructing Quartermaster. 12-4t

## TRUNK SE[illegible]R.

Sealed proposals for co[illegible] m, Mass. [illegible] tion of two sections of North River T[illegible] ewer will be received by the Sewera[illegible] mmission of Salem, Massachusetts, at th[illegible] r's office, City Hall, Salem, Massa[illegible] s, until 4 o'clock p. m. of September [illegible]. All proposals must be made on [illegible] forms furnished by the Engineer [illegible] t be accompanied by a certified che[illegible] able to the City of Salem, for the sum [illegible] e thusand dollars for each section.

Approximate length of sew[illegible]
Section 2.......1,735 lin. [illegible] sewer.
Section 6.......2,170 lin. [illegible] ewer.

Plans, profiles and spe[illegible] may be seen and forms of proposal [illegible] at the office of the Engineer, Cit[illegible] Salem, Massachusetts.

The Commission reserve th[illegible] to reject any or all bids.

JOSEPH N. PETE[illegible]
12-1t [illegible]rman.

## RAILWAY WORK.

Atlantic Coast Line Railroad [illegible]pany,
Office of Chief En[illegible]
Wilmington, N. C., Sept. [illegible] 1904.

Sealed proposals will be receiv[illegible] until 12 noon, Oct. 12th, at the office of the Assistant Engineer at Jacksonville, Fla., for the construction of wharfs and piers, a[illegible] for the grading for tracks and yards at the proposed Export Terminal at Jacksonville, Fla.

The work will require approximately 250,000 lineal feet of piling, 2,000,000 feet B. M. of lumber and 50,000 cu. yds. of earth excavation.

Plans and specifications for the work may be seen at the office of the Assistant Engineer at Jacksonville or at this office.

E. B. PLEASANTS,
12-3t Chief Engineer.

## 11,000 FT. OF PIPE SEWERS.

Indiana, Pa.

Sealed proposals will be received by the Borough at Indiana, until seven thirty p. m., Monday, September twenty-six, for eleven thousand feet of six, eight and ten-inch sewers. Certified check for five hundred dollars, payable to Jno. B. Taylor, treasurer, must accompany each bid.

12-1t R. MULLEN, Engr.

PROPOSALS FOR ELECTRICAL GENERATORS AND SWITCHBOARD.—West Point, N. Y., September 7, 1904.—Sealed proposals, in triplicate, will be received until 12 o'clock noon, October 6, 1904, for the construction and installation of Generators, Motor Generators and Switchboard as per drawings and specifications in this office. U. S. reserves the right to accept or reject any or all proposals or any part thereof. Forms and specifications furnished upon application. Address QUARTERMASTER, U. S. M. A. 10-4t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 15, 1904.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 18th day of October, 1904, and then opened, for the construction (including heating apparatus, electric wiring and conduits) of the U. S. Post Office at Nashua, N. H., in accordance with drawings and specifications, copies of which may be had at this office, or at the office of the Postmaster at Nashua, N. H., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 12-2t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 15, 1904.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 17th day of October, 1904, and then opened, for the construction of the U. S. Government Buildings, Lewis and Clark Centennial Exposition, Portland, Oregon, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent of the U. S. Post Office and Court House at Portland, Oregon, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 12-2t

## Situations Open

(Received on Wednesday, too late for classification.)

WANTED at once by a manufacturing concern in Eastern Pennsylvania, a draftsman on structural work; also a railroad man for field and office work. Address "W. A. 12," Engineering News, New York. 12-4t

WANTED.—For immediate engagement at well-known eastern engineering school, an instructor in surveying, drafting and applied mechanics; must be a technical graduate from high-grade school with some professional experience along above lines. Only young man of high character and ability considered. First year's salary $750. Submit detailed statement of training and experience, with references and testimonials. Address "S. A. 12," Engineering News, New York. 12-1t

PRACTICAL FOREMAN for earth work and concrete construction; state experience and salary. Address "X. A. 12," Engineering News, New York. 12-1t

For other Proposal Advertisements see pages 35, 36, 37. of Advertisements and Construction News page 150.